Longitudinal change in Neuro-QoL measures over 3 years in patients with early Parkinson’s disease

Connie Marras MD, PhD,1 Kelly A. Mills MD,2 Shirley Eberly MS,3 David Oakes PhD,3 Kelvin L. Chou MD, PhD,4 Matthew Halverson BA, BS,5 Sotirios A. Parashos MD, PhD,6 Christopher G. Tarolli MD, MHPE,7 Jin-Shei Lai PhD,8 Cindy J. Nowinsky MD, PhD,9 Oksana Suchowersky MD,10 Eric S. Farbman MD,11 Lisa M. Shulman MD12* and Tanya Simuni MD13*

*LMS and TS should be considered joint senior authors.

Affiliations

1. The Edmond J Safra Program in Parkinson’s Research and the Morton and Gloria Shulman Movement Disorders Centre, Toronto Western Hospital, University of Toronto, Toronto, Canada
2. Johns Hopkins Parkinson’s Disease and Movement Disorders Center, Johns Hopkins University, Baltimore, Maryland
3. Department of Biostatistics and Computational Biology, University of Rochester Medical Center, Rochester, New York
4. Departments of Neurology and Neurosurgery, University of Michigan Medical School, Ann Arbor, MI, USA
5. University of Utah, Salt Lake City, UT. Struthers Parkinson’s Center, Park Nicollet Health Services, Golden Valley, Minnesota, USA
6. Department of Neurology, University of Rochester, Rochester, NY USA
7. Department of Neurology, University of Rochester, Rochester, NY USA
8. Department of Medical Social Sciences, Northwestern University Feinberg School of Medicine
9. Departments of Medical Social Sciences and Neurology, Northwestern University Feinberg School of Medicine
10. Depts. of Medicine (Neurology), Medical Genetics and Pediatrics, University of Alberta.
11. Department of Neurology, Roseman University of Health Sciences, Las Vegas, NV, USA
12. Department of Neurology, University of Maryland School of Medicine
13. Department of Neurology, Feinberg School of Medicine, Northwestern University

This is the author manuscript accepted for publication and has undergone full peer review but has not been through the copyediting, typesetting, pagination and proofreading process, which may lead to differences between this version and the Version of Record. Please cite this article as doi: 10.1002/mds.28641

This article is protected by copyright. All rights reserved.
Corresponding Author:

Connie Marras
7 McL Toronto Western Hospital
399 Bathurst St. Toronto, ON Canada M5T 2S8
Tel: 416-603-6422
Fax: 416-603-5004
Email: cmarras@uhnresearch.ca

Word Count: Abstract: 151  Text: 1749
Keywords: quality of life, measurement, Parkinson’s disease, Neuro-QoL
Running title: Neuro-QoL in Parkinson’s disease

Funding Source and financial disclosure: This study was conducted with financial support from the National Institutes of Neurological Disorders and Stroke grants U01NS080818 and U01NS080840
Disclosures

**CM:** Dr. Marras received research support as a site investigators for the STEADY-PD III study. She is a consultant for Grey Matter Technologies and receives financial compensation as a steering committee member from the Michael J Fox Foundation and the Parkinson's Foundation (US) She received research grants from the Michael J Fox Foundation, Canadian Institutes of Health Research, Parkinson’s International Parkinson and Movement Disorders Society and as a site investigator for clinical trials sponsored by Theravance Inc, the Michael J Fox Foundation and Centogene.

**KAM:** Dr. Mills received research support for involvement in the STEADY-PD III study. Dr. Mills receives research funding from the NIH/NINDS (1K23NS101096-01A1), Global Kinetics Corporation, and the RMS Foundation.

**SE:** Ms. Eberly’s work on this project was supported by grants from the NIH. Over the past 12 months she has also received research support from Vaccinex Inc., the Michael J. Fox Foundation and Grey Matter Technologies.

**DO:** Dr. Oakes’s work on this project was supported by grants from the NIH. Over the past 12 months he has also received Research including salary support from Vaccinex Inc., the Michael J. Fox Foundation and Grey Matter Technologies. He has received honoraria from the University of Pennsylvania for service on a DSMB and from Springer Inc. for editorial work and book royalties from Taylor and Francis Inc. and Springer Inc.

**KLC:** Dr. Chou received research support as a site investigator in the STEADY-PD III study. Dr. Chou received research funding from the NIH (NS107158), Parkinson Study Group, Voyager Therapeutics, and Neuraly. He has served as a consultant for Accordant, CNS Ratings, and Watermark Research Partners, Inc, and received royalties from UpToDate and Springer Publishing.

**SAP:** Financial disclosure related to research covered in this article: None. Full financial disclosure for the previous 12 months: research support from The Parkinson’s Foundation and the Park Nicollet Foundation; royalties from Oxford University Press; shareholder, Abbott; consultancies: Abbvie

**MH:** No disclosures.

**ESF:** Received research support as a site investigator in the STEADY-PD III study and has been on advisory boards for Acorda Neurosciences and US WorldMeds.
**JSL:** Financial disclosure related to research covered in this article: Nothing to disclose. Dr. Lai received research funding from the NIH and FDA. She has served as a consultant for Intuitive, Inc, and NorthShore University HealthSystem.

**CJN:** Dr. Nowinski received research support from NIH as a co-investigator on the original Neuro-QoL development project. Dr. Nowinski receives research funding from the NIH (UG3NS105562, U2CAG060426, U2CAG057441, 75N94019D00005) and the FDA (UG3FD006794).

**TS:** Dr. Simuni received research support from NIH as Principal Investigator of the STEADY-PD III study. She has served as a consultant for Acadia, Abbvie, Accorda, Adamas, Allergan, Amneal, Aptinyx, Denali, General Electric (GE), Kyowa, Neuroderm, Neurocrine, Sanofi, Sinopia, Sunovion, Roche, Takeda, Voyager, US World Meds, Parkinson’s Foundation, and the Michael J. Fox Foundation for Parkinson’s Research; Dr. Simuni has served as a speaker and received an honorarium from Acadia and Adamas; Dr Simuni is on the Scientific advisory board for Neuroderm and Sanofi. Dr. Simuni has received research funding from the NINDS, Parkinson’s Foundation, MJFF, Biogen, Roche, Neuroderm, Sanofi, Sun Pharma, Abbvie, IMPAX and Prevail.

**LMS:** Dr. Shulman received research support as an investigator in the STEADY-PD III study. Dr. Shulman receives research funding from the NIH (1R01AG059651-01; 1R01AG059651-03S1), The Maryland Innovation Initiative, The Rosalyn Newman Foundation, and the Eugenia and Michael Brin Family. She receives royalties from Oxford University Press and Johns Hopkins University Press.

**CGT:** No disclosures

**OS:** Dr. Suchowersky received research support as a site investigator for the STEADY-PD III study. She has received research grants from Wave Life Sciences and Roche, and is financially supported by the University of Alberta Toupin Foundation.
Abstract

**Background:** The Quality of Life in Neurological Disorders (Neuro-QoL) is a publicly available health-related quality of life measurement system.

**Objectives:** To evaluate utility of Neuro-QoL item banks as outcome measures for clinical trials in Parkinson’s disease.

**Methods:** An analysis of Neuro-QoL responsiveness to change and construct validity in a multi-center clinical trial cohort.

**Results:** Among 310 participants over 3 years, changes in five of eight Neuro-QoL domains were significant (p<0.05) but very modest. The largest effect sizes were seen in the cognition and mobility domains (0.35-0.39). The largest effect size for change over the year in which levodopa was initiated was -0.19 for lower extremity function - mobility. For a similarly designed clinical trial, estimated sample size required to demonstrate a 50% reduction in worsening ranged from 420 to over 1000 participants per group.

**Conclusions:** To serve as an outcome measure in early Parkinson’s disease more sensitive tools will be required.
Introduction

Measuring disease progression in Parkinson’s disease (PD) in a way that captures the full breadth of clinical change and reflects what is meaningful to patients is challenging. The US Food and Drug Administration guides industry in their drug labeling claims to assess efficacy using patient-reported outcomes (PRO) when measuring a concept best known by the patient or best measured from the patient perspective such as symptom burden and functional status.\(^1\) This includes symptom burden and functional status. To this end, PRO are useful in clinical trials and observational outcomes research, but must be responsive to change over the duration of a disease-modifying clinical trial.

The Quality of Life in Neurological Disorders (Neuro-QoL) measurement system consists of item banks addressing 13 domains across physical, mental, and social health\(^2\) that are not disease-specific. The Neuro-QoL measures have been little studied in PD.\(^3\) The International Parkinson and Movement Disorder Society (MDS) Task Force for Rating Scales has rated the disability-related item banks as ‘recommended’ for use in PD for the evaluation of disability.\(^4\) The last comprehensive review of Health Related Quality of Life (HR-QoL) scales in PD by the MDS Task Force (2011)\(^5\) did not evaluate the Neuro-QoL measures. Based on longitudinal change of the Neuro-QoL measures over a 3-year period in patients with early PD enrolled in a disease-modifying clinical trial, we evaluated their responsiveness to change, construct validity, and the feasibility of using the Neuro-QoL item banks as outcome measures in clinical research based on sample sizes required.
Methods

Data collection

The Safety, Tolerability, and Efficacy Assessment of Dynacirc CR in PD study (STEADY-PD, reported previously) was a multicenter randomized double-blind placebo-controlled clinical trial of isradipine in early PD. At enrollment, participants were required to have Hoehn and Yahr stage less than or equal to 2, and to be within 3 years of diagnosis. They could not be currently receiving dopaminergic therapy. Ninety-five percent of participants completed the 3 years of follow-up. Participants completed eight short form paper versions of the Neuro-QoL item banks (Table 1) annually. They also completed the PD-specific HR-QoL measure at the same visit: Parkinson’s Disease Questionnaire – 39 (PDQ-39), and the Unified Parkinson’s disease Rating Scale (UPDRS) and MDS-UPDRS.

Statistical Analysis

Isradipine was not found to have an influence on the progression of PD as measured by total UPDRS parts I-III scores, so isradipine and placebo groups were combined in this analysis. The Neuro-QoL measures were compared to conceptually similar PDQ-39 sub-scores and MDS-UPDRS item 1.1 (cognitive impairment). Correlations were assessed using Spearman correlation coefficients. Effect sizes were calculated as follows: \( \frac{\text{mean(3years)}-\text{mean(baseline)}}{\text{SD(3years-baseline)}} \). Conditional minimal detectable change, which determines whether an observed change for an individual exceeds measurement error, reference values were taken from Kozlowski et al. Responsiveness to treatment was assessed
by evaluating the change in Neuro-QoL scores before and after initiation of levodopa. P-values <0.05 were considered statistically significant. Sample size calculations for a hypothetical clinical trial were modeled using data from STEADY-PD III and based on a two-sided test with alpha = 0.05 and beta = 0.2.

**Results**

At baseline, the mean age of the 336 individuals enrolled in STEADY-PD was 62 years (SD 9, range 31-83), mean disease duration 10 months (SD 9, range 1-39), mean total UPDRS 23 (SD 9, range 6-52). See Supplementary Table 1 for full characteristics. The following results are based on 310 individuals who completed the full 3 years of follow up (visit 10) including completing the Neuro-QoL measures.

Correlations of the changes over 3 years between Neuro-QoL and commonly used measures are shown in Table 1. All correlation coefficients were significant and ranged from absolute values of 0.19 to 0.53.

Neuro-QoL scores at the 3-year visit in the Neuro-QoL domains of anxiety, lower extremity mobility, upper extremity fine motor, executive function and applied cognition general concerns were statistically significantly worse compared to baseline. Effect sizes for these changes were small to moderate; the largest effect sizes were seen in the cognitive and mobility domains (0.35-0.39). Effect sizes for change in the comparison measures were similar in magnitude (Table 2).
For worsening, the largest proportion of scores exceeding the conditional minimal detectable change threshold was in the applied cognition – general concerns domain (19%). For improvement, the largest proportion was seen in the domain of positive affect (15%) (Supplementary Table 2).

114 individuals started levodopa over the course of the trial and had pre- and post-levodopa assessments with Neuro-QoL measures approximately one year apart. Compared with the 69 individuals who were deemed to require symptomatic treatment but were not on levodopa at the visit following this, the mean MDS-UPDRS part III score change was significantly different (improved): -6.35 (95% CI: -7.84, -4.85) for those starting levodopa vs -0.36 (95% CI: -2.22, 1.50) for those not starting levodopa. In contrast, there were no statistically significant differences in Neuro-QoL changed score between those starting and not starting levodopa (Supplementary Table 3). Effect sizes ranged from -0.007 for positive affect and well-being to -0.19 for lower extremity function - mobility. Treatment of half of the cohort with isradipine without benefit but with a proportion experiencing adverse effects could affect Neuro-QoL change scores in some domains. To address this we repeated both the 3 year analyses and the pre-post levodopa analyses within the placebo group only, and found very similar results (data not shown).

Sample size estimates
Supplementary Table 4 shows the required sample sizes for a putative 3-year clinical trial testing a disease-modifying intervention for early stage PD, using change scores of the Neuro-QoL measures or the corresponding comparison measures as endpoints. To demonstrate a 50% reduction in the rate of worsening, the estimated sample size required was smallest for the Neuro-QoL cognition and lower extremity function (400-500 participants per group) and 1000 or greater participants per group for upper extremity function and emotional symptom-related domains. The sample size requirements for the corresponding comparison measures were similar with the exception of measures related to ADL and cognition. The PDQ-39 ADL sub-score required a smaller sample size than the Neuro-QoL upper extremity function (473 vs 960). The sample size required to detect a 50% reduction in worsening of either of the Neuro-QoL cognitive domains was less than that which would be required for MDS-UPDRS 1.1 (400 vs 848).

Discussion

Examining the evolution of Neuro-QoL scores in the context of a negative clinical trial serves as a model for what can be expected in placebo arms or when starting dopaminergic therapy. Statistically significant correlations that are low-moderate in magnitude between the Neuro-QoL changed scores and those of conceptually related measures support the conceptual relatedness of the comparison measures, but also suggest that the Neuro-QoL scores are capturing something different than the corresponding PDQ-39 score or MDS-UPDRS item. For some comparisons, this is expected as the concepts covered are either more specific (e.g.
anxiety (Neuro-QoL) vs general emotional well-being (PDQ-39)) or different (positive affect and well-being (Neuro-QoL) vs negative emotions (PDQ-39)).

Over the three-year period, changes are of low magnitude with correspondingly small to moderate effect sizes. For all domains, only a small proportion of change scores exceeded the conditional minimal detectable change threshold. Effect sizes for the comparison measures are of similar magnitude. This may reflect the fact that there is not a great deal of change in performance of daily activities in early PD, which is the emphasis of the physical function-related Neuro-QoL measures. Similar modest changes and substantial floor effects are seen with the MDS-UPDRS part II in early PD as well, particularly after initiation of dopaminergic treatment. The relatively stable HR-QoL scores over time in this cohort might be related to ‘response shift’, in which patients with chronic conditions adapt their internal standards and values, over the course of disease. It has been demonstrated that people with PD tend to minimize assessments of change in HR-QoL over time.

The ability of the Neuro-QoL to detect the effect of levodopa appears poor. It is important to acknowledge that the Neuro-QoL measures were only administered annually, and the long interval between the preceding off-drug and the subsequent on-drug assessments may dilute change scores related to starting symptomatic therapy. The larger effect sizes over the three year period compared to before/after levodopa may also reflect the fact that responsiveness to improvement is not necessarily the same as responsiveness to decline. Our finding was similar
to Lamichhane et al., whereby disability and HR-QoL measures were less responsive to improvement than they were to decline.

Using any of the Neuro-QoL measures, the sample sizes required to show a substantial 50% reduction in worsening are larger than the size of the original trial and substantially larger than the vast majority of most previous disease-modifying clinical trials in PD. The STEADY-PD trial of isradipine was powered to detect a 25% reduction in worsening of the sum of the UPDRS parts I-III from baseline to 3 years, a magnitude of effect that would require more than 1,000 participants given the distribution of change in Neuro-QoL scores seen over the course of the study. Sample size requirements for a shorter trial (as for most disease-modifying studies in PD to date) would be even larger. This calls into question the practicality of using Neuro-QoL (or other HR-QoL measures) as an outcome measure in similarly designed early PD disease modifying trials.

Limitations of this study include the lack of a true gold standard of change against which to compare the Neuro-QoL measures. To our knowledge, there is no established minimal clinically important difference for the Neuro-QoL measures in PD so we could not assess the clinical importance of the longitudinal Neuro-QoL changes in this cohort.

Conclusion
The minor changes over time in Neuro-Qol measures in early PD do not imply that the instruments are not useful outcomes research tools in PD. There is a movement in clinical trials research to emphasize endpoints that are meaningful to patients and reflect how they value outcomes as opposed to the outcome itself. Measuring HR-QoL in PD is important, but to serve as an outcome measure for clinical trials more sensitive tools will be required, at least in early PD. The performance of Neuro-QoL measures in studies testing therapies in cohorts with more advanced disease should be further explored, as studies of outcomes relevant to mid and later stage PD such as cognition, may find Neuro-Qol to be a more informative measure. Furthermore, the Neuro-QoL instruments may have an important place in observational and cross-disease studies. Future research should seek to define clinically important differences in the Neuro-QoL measures to inform their interpretation.

Author Roles:

CM:
1) Research project: A. Conception, B. Organization, C. Execution;
2) Statistical Analysis: A. Design
3) Manuscript: A. Writing of the first draft

KAM:
1) Research project: A. Conception,
2) Statistical Analysis: C. Review and Critique;
3) Manuscript: B. Review and Critique.

SE:
1) Research project: A. Conception, C. Execution;
3) Manuscript: B. Review and Critique.
DO:

1) Research project: A. Conception, C. Execution;
3) Manuscript: B. Review and Critique.

KLC:
1) Research project: A. Conception,
2) Statistical Analysis: C. Review and Critique;
3) Manuscript: B. Review and Critique

SAP:
1) Research project: A. Conception,
2) Statistical Analysis: C. Review and Critique;
3) Manuscript: B. Review and Critique

MH:
1) Research project: A. Conception,
2) Statistical Analysis: C. Review and Critique;
3) Manuscript: B. Review and Critique

ESF:
1) Research project: A. Conception,
2) Statistical Analysis: C. Review and Critique;
3) Manuscript: B. Review and Critique

JSL:
1) Research project: A. Conception,
2) Statistical Analysis: C. Review and Critique;
3) Manuscript: B. Review and Critique

CJN:
1) Research project: A. Conception,
2) Statistical Analysis: C. Review and Critique;
3) Manuscript: B. Review and Critique

TS:.
1) Research project: A. Conception, B. Organization
2) Statistical Analysis: C. Review and Critique;
3) Manuscript: B. Review and Critique

**LJS:**
1) Research project: A. Conception,
2) Statistical Analysis: C. Review and Critique;
3) Manuscript: B. Review and Critique

**CGT:**
1) Research project: A. Conception,
2) Statistical Analysis: C. Review and Critique;
3) Manuscript: B. Review and Critique

**OS:**
1) Research project: A. Conception,
2) Statistical Analysis: C. Review and Critique;
3) Manuscript: B. Review and Critique
References

COPYRIGHT TRANSFER AGREEMENT

Date: 4/10/21

Contributor name: KELVIN CHOU, M.D.

Contributor address: 2301 COMMONWEALTH BLVD., ANN ARBOR, MI 48105

Manuscript number: MDS-21-0030

Re: Manuscript entitled: Longitudinal change in Neuro-Qol measures over 3 years in early Parkinson's disease (the "Contribution")

for publication in: Movement Disorders (the "Journal")

Published by Wiley on behalf of The International Parkinson and Movement Disorder Society (the "Owner")

Dear Contributor(s):

Thank you for submitting your Contribution for publication. In order to expedite the editing and publishing process and enable the Owner to disseminate your Contribution to the fullest extent, we need to have this Copyright Transfer Agreement executed. If the Contribution is not accepted for publication, or if the Contribution is subsequently rejected, this Agreement shall be null and void. Publication cannot proceed without a signed copy of this Agreement.

A. COPYRIGHT

The Contributor assigns to the Owner, during the full term of copyright and any extensions or renewals, all copyright in and to the Contribution, and all rights therein, including but not limited to the right to reproduce, publish, republish, transmit, sell, transfer, distribute, and otherwise use the Contribution in whole or in part in electronic and print editions of the Journal and in derivative works throughout the world, in all languages and in all media of expression now known or later developed, and to license or permit others to do so.

B. RETAINED RIGHTS

Notwithstanding the above, the Contributor or, if applicable, the Contributor’s employer, retains all proprietary rights other than copyright, such as patent rights, in any process, procedure or article of manufacture described in the Contribution. This reservation of rights does not affect or limit the rights assigned to Owner in Section A.

C. PERMITTED USES BY CONTRIBUTOR

1. License. The Owner grants to Contributor a non-exclusive, non-transferable and limited license to reproduce and distribute copies of the print or electronic “preprints” of the unpublished Contribution, in the original form submitted to the Journal prior to the peer review process, solely to colleagues within the Contributor’s nonprofit organization or educational institution. The Contributor shall make no more than 100 printed copies of the preprints in any calendar year. Such preprints may be posted as electronic files on the Contributor’s own personal website, on the Contributor’s internal intranet at Contributor’s nonprofit organization or educational institution, or on a secure external website at the Contributor’s nonprofit organization or educational institution, provided that access is limited to employees and/or students at Contributor’s non-profit organization or educational institution. Contributor shall not charge a fee for any
preprints, and Contributor’s use under this Section C shall not be for any commercial purpose, or for any systematic external distribution (e.g., posting on a listserv, public website, database connected to a public access server, or automated delivery system). The license grant in this Section does not apply to for-profit corporations, and any proposed use outside of the scope of this Section C must be pre-approved in writing by the Owner. The rights granted to Contributor under this Section C do not include reproduction, distribution or any other use of rating scales, videos or other audiovisual materials associated with the Contribution.

2. Required Citation. Prior to publication, the Contributor must provide full credit and acknowledgement of the Journal in all preprints in the following format: This is a preprint of an article accepted for publication in [Journal Title], Copyright © [year] The International Parkinson and Movement Disorder Society. After publication, the Contributor must provide a citation to the Journal in all preprints in the following format: This is a preprint of an article that was published in [Journal title]: (Title of Article, Contributor, Journal Title and Volume/Issue, Copyright © [year] The International Parkinson and Movement Disorder Society). An electronic link must be provided to the Journal’s website, located at http://www.interscience.wiley.com. The Contributor agrees not to update the preprint or replace it with the published version of the Contribution.

3. Accepted Version. Re-use of the accepted and peer-reviewed (but not the final typeset published) version of the Contribution (the “Accepted Version”) is not permitted under this Agreement. There are separate arrangements with certain funding agencies governing reuse of the Accepted Version. Additional terms apply if the Contributor receives or received funding from these agencies. The details of those relationships, and other offerings allowing open web use, are set forth at the following website: http://www.wiley.com/go/funderstatement.

4. Additional Terms for Certain Funders. Certain funders, including the NIH, members of the Research Councils UK (RCUK) and Wellcome Trust require deposit of the Accepted Version in a public repository after an embargo period. Details of funding arrangements are set out at the following website: http://www.wiley.com/go/funderstatement. Additional terms may be applicable. Please contact the production editor for the journal at MDSprod@wiley.com if you have additional funding requirements.

If any Contributor receiving funds from applicable sources does not choose the Owner’s OnlineOpen option, the Contributor will be allowed to self-archive by depositing the Accepted Version in a public repository after the following applicable embargo period has expired, subject to further conditions imposed by the RCUK:

a. 12 months from first publication online of the final published version of the Contribution for research funded by members of the Research Councils UK (RCUK) other than The Economic and Social Research Council (ESRC) and the Arts and Humanities Research Council (AHRC); or

b. 24 months from first publication online of the final published version of the Contribution for research funded by ESRC or AHRC.

5. Additional Terms for Certain Institutions. Wiley has arrangements with certain educational institutions to permit the deposit of the Accepted Version in the institutional repository after an embargo period. Details of such arrangements are set out at the following website: http://olabout.wiley.com/WileyCDA/Section/id-406074.html. Additional terms may be applicable.

If any Contributor affiliated with these applicable educational institutions does not choose the Owner’s OnlineOpen option, the Contributor will be allowed to self-archive by depositing the Accepted Version in the educational institution’s repository after the following applicable embargo period has expired. See the following website for details: http://olabout.wiley.com/WileyCDA/Section/id-817011.html.
D. CONTRIBUTIONS OWNED BY EMPLOYER

If the Contribution was written by the Contributor in the course of the Contributor’s employment (as a “work-made-for-hire” in the course of employment), the Contribution is owned by the company/institution which must execute this Agreement (in addition to the Contributor’s signature). In such case, the company/institution hereby assigns to the Owner, during the full term of copyright, all copyright in and to the Contribution for the full term of copyright throughout the world as specified in Section A above.

E. GOVERNMENT CONTRACTS

In the case of a Contribution prepared under U.S. Government contract or grant, the U.S. Government may reproduce, without charge, all or portions of the Contribution and may authorize others to do so, for official U.S. Government purposes only, if the U.S. Government contract or grant so requires. (U.S. Government, U.K. Government, and other government employees: see notes at end.)

F. CONTRIBUTOR’S REPRESENTATIONS

The Contributor represents that the Contribution is the Contributor’s original work, all individuals identified as Contributors actually contributed to the Contribution, and all individuals who contributed are included. The Contribution is submitted only to this Journal and has not been published before. (If excerpts from copyrighted works owned by third parties are included, the Contributor will obtain written permission from the copyright owners for all uses as set forth in the Journal’s Instructions for Contributors, and show credit to the sources in the Contribution.) The Contributor also warrants that the Contribution contains no libelous or unlawful statements, does not infringe upon the rights (including without limitation the copyright, patent or trademark rights) or the privacy of others, or contain material or instructions that might cause harm or injury. Upon request, Contributor will provide the data or will cooperating fully in obtaining and providing the data on which the Contribution is based for examination by the editors or their assignees.

G. FINANCIAL DISCLOSURES

The Contributor certifies that his/her financial and material support for this research and work, regardless of date, is clearly identified on Exhibit A to this Agreement. The Contributor has also identified on Exhibit A, all other support unrelated to this research, covering the past year from the date of submission (e.g., grants, advisory boards, employment, consultancies, contracts, honoraria, royalties, expert testimony, partnerships, or stock ownership in medically-related fields).

H. VIDEO AND PHOTOGRAPHY CONSENT

In the event that the Contribution includes, discloses or incorporates any content (including, without limitation, any video clip or photograph) which identifies any individual patient(s) (“patient identifiable content”), the Contributor obtained from such patient(s) written consent to such inclusion, disclosure or incorporation and that this consent fully complies with all legal requirements, including without limitation, all of the requirements of the laws of the jurisdiction(s) to which the patient(s) and the patient(s)’ physician are subject, including the United States Health Insurance Portability and Accountability Act of 1996 (“HIPAA”) if applicable. The Contributor hereby certifies that, if the patient consent form is in a language other than English, such consent form meets all of the requirements set forth in the Instructions to Authors. In addition, the Contributor hereby confirms that he/she obtained from patient(s) written consent to use the patient identifiable content in both print and online (i.e., internet/web-based) publication formats. The Contributor further certifies that the person executing any such patient consent form, to the best of his/her knowledge, had legal capacity under applicable law to execute the form on behalf of the patient.
I. ACKNOWLEDGEMENTS

The Contributor should obtain written permission from all individuals named in the acknowledgement since readers may infer their endorsement of data and conclusions. The Contributor certifies that all individuals named in the acknowledgement section have provided written permission to be named.

J. MISCELLANEOUS

This Agreement may be amended or modified only in a writing executed by both parties. The waiver or failure of any party to exercise any rights under this Agreement shall not be deemed a waiver or other limitation of any other right or any future right. This Agreement shall inure to the benefit of, and shall be binding upon, the parties, their respective successors and permitted assigns. This Agreement may be executed in two (2) or more counterparts, each of which shall be an original and all of which taken together shall constitute one and the same agreement. Executed copies of this Agreement may be delivered by facsimile transmission, pdf/email or other comparable electronic means. If for any reason any provision of this Agreement shall be deemed by a court of competent jurisdiction to be legally invalid or unenforceable, the validity, legality and enforceability of the remainder of this Agreement shall not be affected and such provision shall be deemed modified to the minimum extent necessary to make such provision consistent with applicable law and, in its modified form, such provision shall then be enforceable and enforced. The parties agree to do such further acts and to execute and deliver such additional agreements and instruments from time to time as either may at any time reasonably request in order to assure and confirm unto such requesting party the rights, powers and remedies conferred in the Agreement. This Agreement, including any exhibits attached hereto, contains the entire agreement and understanding of the parties with respect to the subject matter hereof, and supersedes all prior agreements, negotiations, representations and proposals, written and oral, relating thereto.

All Contributors must sign below. Contributors must check one box except that NIH grantees should check both Contributor-owned work and the NIH grantee box. If your Contribution was written during the course of employment, your employer must also sign where indicated.

Please send your original completed and signed forms by fax or email a scanned copy to the Journal production editor. For production editor contact details please visit the Journal’s online author guidelines. Do not send in hard copies of these forms.

[ ] Contributor-owned work

Contributor’s signature

Date

Kevin L. Chou, Professor of Neurology

Type or print name and title

Co-Contributor’s signature

Date

Type or print name and title
[_____] Company/Institution-owned Work (made-for-hire in the Course of employment)

Company or Institution (Employer-for-Hire) Date

Authorized signature of Employer Date

Contributor's signature Date

Type or print name and title

ATTACH ADDITIONAL SIGNATURE PAGES AS NECESSARY

[_____] U.S. Government work

Note to U.S. Government Employees

A contribution prepared by a U.S. federal government employee as part of the employee's official duties, or which is an official U.S. Government publication, is called a "U.S. Government work", and is in the public domain in the United States. In such case, Paragraph A.1 will not apply but the Contributor must type his/her name (in the Contributor's signature line) above. Contributor acknowledges that the Contribution will be published in the United States and other countries. If the Contribution was not prepared as part of the employee's duties or is not an official U.S. Government publication, it is not a U.S. Government work.

[_____] U.K. Government work (Crown Copyright)

Note to U.K. Government Employees

The rights in a contribution prepared by an employee of a UK government department, agency or other Crown body as part of his/her official duties, or which is an official government publication, belong to the Crown. Contributors must ensure they comply with departmental regulations and submit the appropriate authorisation to publish. If your status as a government employee legally prevents you from signing this Agreement, please contact the Journal production editor.

[_____] Other

Including Other Government work or Non-Governmental Organisation work

Note to Non-U.S., Non-U.K. Government Employees or Non-Governmental Organisation Employees

If your status as a government or non-governmental organisation employee legally prevents you from signing this Agreement, please contact the Journal production editor.
Exhibit A

Financial Disclosure

The Contributor has received financial and material support for this research and work regardless of date from the following sources:

Parkinson Study Group as an investigator for STEADY-PD III

In the past year from the date of submission, the Contributor has also received the following support unrelated to this research (e.g., grants, advisory boards, employment, consultancies, contracts, honoraria, royalties, expert testimony, partnerships, or stock ownership in medically-related fields):

Grants:
NIH (NS107158)
Parkinson Study Group (SURE-PD3, NILC-PD, RAD-PD)
Eli Lilly
Voyager Therapeutics
Neuraly

Consulting:
Accordant
CNS Ratings
Watermark Research Partners, Inc.

Royalties:
UpToDate
Springer Publishing
COPYRIGHT TRANSFER AGREEMENT

Date: 

Contributor name: 

Contributor address: 

Manuscript number: MDS-21-0030

Re: Manuscript entitled: Longitudinal change in Neuro-Qol measures over 3 years in early Parkinson's disease (the "Contribution")

for publication in: Movement Disorders (the "Journal")

Published by Wiley on behalf of The International Parkinson and Movement Disorder Society (the "Owner")

Dear Contributor(s):

Thank you for submitting your Contribution for publication. In order to expedite the editing and publishing process and enable the Owner to disseminate your Contribution to the fullest extent, we need to have this Copyright Transfer Agreement executed. If the Contribution is not accepted for publication, or if the Contribution is subsequently rejected, this Agreement shall be null and void. Publication cannot proceed without a signed copy of this Agreement.

A. COPYRIGHT

The Contributor assigns to the Owner, during the full term of copyright and any extensions or renewals, all copyright in and to the Contribution, and all rights therein, including but not limited to the right to reproduce, publish, republish, transmit, sell, transfer, distribute, and otherwise use the Contribution in whole or in part in electronic and print editions of the Journal and in derivative works throughout the world, in all languages and in all media of expression now known or later developed, and to license or permit others to do so.

B. RETAINED RIGHTS

Notwithstanding the above, the Contributor or, if applicable, the Contributor's employer, retains all proprietary rights other than copyright, such as patent rights, in any process, procedure or article of manufacture described in the Contribution. This reservation of rights does not affect or limit the rights assigned to Owner in Section A.

C. PERMITTED USES BY CONTRIBUTOR

1. License. The Owner grants to Contributor a non-exclusive, non-transferable and limited license to reproduce and distribute copies of the print or electronic "preprints" of the unpublished Contribution, in the original form submitted to the Journal prior to the peer review process, solely to colleagues within the Contributor's nonprofit organization or educational institution. The Contributor shall make no more than 100 printed copies of the preprints in any calendar year. Such preprints may be posted as electronic files on the Contributor's own personal website, on the Contributor's internal intranet at Contributor's nonprofit organization or educational institution, or on a secure external website at the Contributor's nonprofit organization or educational institution, provided that access is limited to employees and/or students at Contributor's non-profit organization or educational institution. Contributor shall not charge a fee for any
preprints, and Contributor's use under this Section C shall not be for any commercial purpose, or for any systematic external distribution (e.g., posting on a listserv, public website, database connected to a public access server, or automated delivery system). The license grant in this Section does not apply to for-profit corporations, and any proposed use outside of the scope of this Section C must be pre-approved in writing by the Owner. The rights granted to Contributor under this Section C do not include reproduction, distribution or any other use of rating scales, videos or other audiovisual materials associated with the Contribution.

2. Required Citation. Prior to publication, the Contributor must provide full credit and acknowledgement of the Journal in all preprints in the following format: This is a preprint of an article accepted for publication in [Journal Title]. Copyright © [year] The International Parkinson and Movement Disorder Society. After publication, the Contributor must provide a citation to the Journal in all preprints in the following format: This is a preprint of an article that was published in [Journal title]: (Title of Article, Contributor, Journal Title and Volume/Issue, Copyright © [year] The International Parkinson and Movement Disorder Society). An electronic link must be provided to the Journal's website, located at http://www.interscience.wiley.com. The Contributor agrees not to update the preprint or replace it with the published version of the Contribution.

3. Accepted Version. Re-use of the accepted and peer-reviewed (but not the final typeset published) version of the Contribution (the "Accepted Version") is not permitted under this Agreement. There are separate arrangements with certain funding agencies governing reuse of the Accepted Version. Additional terms apply if the Contributor receives or received funding from these agencies. The details of those relationships, and other offerings allowing open web use, are set forth at the following website: http://www.wiley.com/go/funderstatement.

4. Additional Terms for Certain Funders. Certain funders, including the NIH, members of the Research Councils UK (RCUK) and Wellcome Trust require deposit of the Accepted Version in a public repository after an embargo period. Details of funding arrangements are set out at the following website: http://www.wiley.com/go/funderstatement. Additional terms may be applicable. Please contact the production editor for the journal at MDSprod@wiley.com if you have additional funding requirements.

If any Contributor receiving funds from applicable sources does not choose the Owner's OnlineOpen option, the Contributor will be allowed to self-archive by depositing the Accepted Version in a public repository after the following applicable embargo period has expired, subject to further conditions imposed by the RCUK:

a. 12 months from first publication online of the final published version of the Contribution for research funded by members of the Research Councils UK (RCUK) other than The Economic and Social Research Council (ESRC) and the Arts and Humanities Research Council (AHRC); or

b. 24 months from first publication online of the final published version of the Contribution for research funded by ESRC or AHRC.

5. Additional Terms for Certain Institutions. Wiley has arrangements with certain educational institutions to permit the deposit of the Accepted Version in the institutional repository after an embargo period. Details of such arrangements are set out at the following website: http://olabout.wiley.com/WileyCDA/Section/id-406074.html. Additional terms may be applicable.

If any Contributor affiliated with these applicable educational institutions does not choose the Owner's OnlineOpen option, the Contributor will be allowed to self-archive by depositing the Accepted Version in the educational institution's repository after the following applicable embargo period has expired. See the following website for details: http://olabout.wiley.com/WileyCDA/Section/id-817011.html.
D. CONTRIBUTIONS OWNED BY EMPLOYER

If the Contribution was written by the Contributor in the course of the Contributor’s employment (as a “work-made-for-hire” in the course of employment), the Contribution is owned by the company/institution which must execute this Agreement (in addition to the Contributor’s signature). In such case, the company/institution hereby assigns to the Owner, during the full term of copyright, all copyright in and to the Contribution for the full term of copyright throughout the world as specified in Section A above.

E. GOVERNMENT CONTRACTS

In the case of a Contribution prepared under U.S. Government contract or grant, the U.S. Government may reproduce, without charge, all or portions of the Contribution and may authorize others to do so, for official U.S. Government purposes only, if the U.S. Government contract or grant so requires. (U.S. Government, U.K. Government, and other government employees: see notes at end.)

F. CONTRIBUTOR’S REPRESENTATIONS

The Contributor represents that the Contribution is the Contributor’s original work, all individuals identified as Contributors actually contributed to the Contribution, and all individuals who contributed are included. The Contribution is submitted only to this Journal and has not been published before. (If excerpts from copyrighted works owned by third parties are included, the Contributor will obtain written permission from the copyright owners for all uses as set forth in the Journal’s Instructions for Contributors, and show credit to the sources in the Contribution.) The Contributor also warrants that the Contribution contains no libelous or unlawful statements, does not infringe upon the rights (including without limitation the copyright, patent or trademark rights) or the privacy of others, or contain material or instructions that might cause harm or injury. Upon request, Contributor will provide the data or will cooperating fully in obtaining and providing the data on which the Contribution is based for examination by the editors or their assignees.

G. FINANCIAL DISCLOSURES

The Contributor certifies that his/her financial and material support for this research and work, regardless of date, is clearly identified on Exhibit A to this Agreement. The Contributor has also identified on Exhibit A, all other support unrelated to this research, covering the past year from the date of submission (e.g., grants, advisory boards, employment, consultancies, contracts, honoraria, royalties, expert testimony, partnerships, or stock ownership in medically-related fields).

H. VIDEO AND PHOTOGRAPHY CONSENT

In the event that the Contribution includes, discloses or incorporates any content (including, without limitation, any video clip or photograph) which identifies any individual patient(s) (“patient identifiable content”), the Contributor obtained from such patient(s) written consent to such inclusion, disclosure or incorporation and that this consent fully complies with all legal requirements, including without limitation, all of the requirements of the laws of the jurisdiction(s) to which the patient(s) and the patient(s)’ physician are subject, including the United States Health Insurance Portability and Accountability Act of 1996 (“HIPAA”), if applicable. The Contributor hereby certifies that, if the patient consent form is in a language other than English, such consent form meets all of the requirements set forth in the Instructions to Authors. In addition, the Contributor hereby confirms that he/she obtained from patient(s) written consent to use the patient identifiable content in both print and online (i.e., internet/web-based) publication formats. The Contributor further certifies that the person executing any such patient consent form, to the best of his/her knowledge, had legal capacity under applicable law to execute the form on behalf of the patient.
I. ACKNOWLEDGEMENTS

The Contributor should obtain written permission from all individuals named in the acknowledgement since readers may infer their endorsement of data and conclusions. The Contributor certifies that all individuals named in the acknowledgement section have provided written permission to be named.

J. MISCELLANEOUS

This Agreement may be amended or modified only in a writing executed by both parties. The waiver or failure of any party to exercise any rights under this Agreement shall not be deemed a waiver or other limitation of any other right or any future right. This Agreement shall inure to the benefit of, and shall be binding upon, the parties, their respective successors and permitted assigns. This Agreement may be executed in two (2) or more counterparts, each of which shall be an original and all of which taken together shall constitute one and the same agreement. Executed copies of this Agreement may be delivered by facsimile transmission, pdf/email or other comparable electronic means. If for any reason any provision of this Agreement shall be deemed by a court of competent jurisdiction to be legally invalid or unenforceable, the validity, legality and enforceability of the remainder of this Agreement shall not be affected and such provision shall be deemed modified to the minimum extent necessary to make such provision consistent with applicable law and, in its modified form, such provision shall then be enforceable and enforced. The parties agree to do such further acts and to execute and deliver such additional agreements and instruments from time to time as either may at any time reasonably request in order to assure and confirm unto such requesting party the rights, powers and remedies conferred in the Agreement. This Agreement, including any exhibits attached hereto, contains the entire agreement and understanding of the parties with respect to the subject matter hereof, and supersedes all prior agreements, negotiations, representations and proposals, written and oral, relating thereto.

All Contributors must sign below. Contributors must check one box except that NIH grantees should check both Contributor-owned work and the NIH grantee box. If your Contribution was written during the course of employment, your employer must also sign where indicated.

Please send your original completed and signed forms by fax or email a scanned copy to the Journal production editor. For production editor contact details please visit the Journal’s online author guidelines. Do not send in hard copies of these forms.

[_____] Contributor-owned work

David Oches
Contributor's signature

DAVID DAKES
Type or print name and title

4/10/2021
Date

[Proфессор]

Co-Contributor's signature

Date

Type or print name and title
Company or Institution (Employer-for-Hire) 

Authorized signature of Employer 

Contributor's signature 

Type or print name and title 

ATTACH ADDITIONAL SIGNATURE PAGES AS NECESSARY 

[ ] U.S. Government work 
Note to U.S. Government Employees 
A contribution prepared by a U.S. federal government employee as part of the employee's official duties, or which is an official U.S. Government publication, is called a "U.S. Government work", and is in the public domain in the United States. In such case, Paragraph A.1 will not apply but the Contributor must type his/her name (in the Contributor's signature line) above. Contributor acknowledges that the Contribution will be published in the United States and other countries. If the Contribution was not prepared as part of the employee's duties or is not an official U.S. Government publication, it is not a U.S. Government work.

[ ] U.K. Government work (Crown Copyright) 
Note to U.K. Government Employees 
The rights in a contribution prepared by an employee of a UK government department, agency or other Crown body as part of his/her official duties, or which is an official government publication, belong to the Crown. Contributors must ensure they comply with departmental regulations and submit the appropriate authorisation to publish. If your status as a government employee legally prevents you from signing this Agreement, please contact the Journal production editor.

[ ] Other 
Including Other Government work or Non-Governmental Organisation work 
Note to Non-U.S., Non-U.K. Government Employees or Non-Governmental Organisation Employees 
If your status as a government or non-governmental organisation employee legally prevents you from signing this Agreement, please contact the Journal production editor.
Exhibit A

Financial Disclosure

The Contributor has received financial and material support for this research and work regardless of date from the following sources:

Name:  
Address:  
Type of support:  

This material will be printed with the published article.

In the past year from the date of submission, the Contributor has also received the following support unrelated to this research (e.g., grants, advisory boards, employment, consultancies, contracts, honoraria, royalties, expert testimony, partnerships, or stock ownership in medically-related fields):

Name:  
Address:  
Type of support:  

This material will be posted on the journal website and may be printed at the Editors’ discretion.

ATTACH ADDITIONAL INFORMATION AS NECESSARY

Gray Matter Technology - salary support
Pfizer - consultancy fee
Springer - Editors fee / Royalties
Fox Foundation - salary support
COPYRIGHT TRANSFER AGREEMENT

Date: Apr. 13, 2021

Contributor name: Dr. O. Suchoworsky

Contributor address: University of Alberta, Edmonton, Canada

Manuscript number: MDS-21-0030

Re: Manuscript entitled: Longitudinal change in Neuro-Qol measures over 3 years in early Parkinson's disease (the Contribution)

for publication in: Movement Disorders (the “Journal”)

Published by Wiley on behalf of The International Parkinson and Movement Disorder Society (the “Owner”)

Dear Contributor(s):

Thank you for submitting your Contribution for publication. In order to expedite the editing and publishing process and enable the Owner to disseminate your Contribution to the fullest extent, we need to have this Copyright Transfer Agreement executed. If the Contribution is not accepted for publication, or if the Contribution is subsequently rejected, this Agreement shall be null and void. Publication cannot proceed without a signed copy of this Agreement.

A. COPYRIGHT

The Contributor assigns to the Owner, during the full term of copyright and any extensions or renewals, all copyright in and to the Contribution, and all rights therein, including but not limited to the right to reproduce, publish, republish, transmit, sell, transfer, distribute, and otherwise use the Contribution in whole or in part in electronic and print editions of the Journal and in derivative works throughout the world, in all languages and in all media of expression now known or later developed, and to license or permit others to do so.

B. RETAINED RIGHTS

Notwithstanding the above, the Contributor or, if applicable, the Contributor’s employer, retains all proprietary rights other than copyright, such as patent rights, in any process, procedure or article of manufacture described in the Contribution. This reservation of rights does not affect or limit the rights assigned to Owner in Section A.

C. PERMITTED USES BY CONTRIBUTOR

1. License. The Owner grants to Contributor a non-exclusive, non-transferable and limited license to reproduce and distribute copies of the print or electronic “preprints” of the unpublished Contribution, in the original form submitted to the Journal prior to the peer review process, solely to colleagues within the Contributor’s nonprofit organization or educational institution. The Contributor shall make no more than 100 printed copies of the preprints in any calendar year. Such preprints may be posted as electronic files on the Contributor’s own personal website, on the Contributor’s internal intranet at Contributor’s nonprofit organization or educational institution, or on a secure external website at the Contributor’s nonprofit organization or educational institution, provided that access is limited to employees and/or students at Contributor’s non-profit organization or educational institution. Contributor shall not charge a fee for any
preprints, and Contributor’s use under this Section C shall not be for any commercial purpose, or for any systematic external distribution (e.g., posting on a listserv, public website, database connected to a public access server, or automated delivery system). The license grant in this Section does not apply to for-profit corporations, and any proposed use outside of the scope of this Section C must be pre-approved in writing by the Owner. The rights granted to Contributor under this Section C do not include reproduction, distribution or any other use of rating scales, videos or other audiovisual materials associated with the Contribution.

2. Required Citation. Prior to publication, the Contributor must provide full credit and acknowledgement of the Journal in all preprints in the following format: This is a preprint of an article accepted for publication in [Journal Title], Copyright © [year] The International Parkinson and Movement Disorder Society. After publication, the Contributor must provide a citation to the Journal in all preprints in the following format: This is a preprint of an article that was published in [Journal title]: (Title of Article, Contributor, Journal Title and Volume/ Issue, Copyright © [year] The International Parkinson and Movement Disorder Society). An electronic link must be provided to the Journal’s website, located at http://www.interscience.wiley.com. The Contributor agrees not to update the preprint or replace it with the published version of the Contribution.

3. Accepted Version. Re-use of the accepted and peer-reviewed (but not the final typeset published) version of the Contribution (the “Accepted Version”) is not permitted under this Agreement. There are separate arrangements with certain funding agencies governing reuse of the Accepted Version. Additional terms apply if the Contributor receives or received funding from these agencies. The details of those relationships, and other offerings allowing open web use, are set forth at the following website: http://www.wiley.com/go/funderstatement.

4. Additional Terms for Certain Funders. Certain funders, including the NIH, members of the Research Councils UK (RCUK) and Wellcome Trust require deposit of the Accepted Version in a public repository after an embargo period. Details of funding arrangements are set out at the following website: http://www.wiley.com/go/funderstatement. Additional terms may be applicable. Please contact the production editor for the journal at MDSprod@wiley.com if you have additional funding requirements.

If any Contributor receiving funds from applicable sources does not choose the Owner’s OnlineOpen option, the Contributor will be allowed to self-archive by depositing the Accepted Version in a public repository after the following applicable embargo period has expired, subject to further conditions imposed by the RCUK:

a. 12 months from first publication online of the final published version of the Contribution for research funded by members of the Research Councils UK (RCUK) other than The Economic and Social Research Council (ESRC) and the Arts and Humanities Research Council (AHRC);

b. 24 months from first publication online of the final published version of the Contribution for research funded by ESRC or AHRC.

5. Additional Terms for Certain Institutions. Wiley has arrangements with certain educational institutions to permit the deposit of the Accepted Version in the institutional repository after an embargo period. Details of such arrangements are set out at the following website: http://olabout.wiley.com/WileyCDA/Section/id-466074.html. Additional terms may be applicable.

If any Contributor affiliated with these applicable educational institutions does not choose the Owner’s OnlineOpen option, the Contributor will be allowed to self-archive by depositing the Accepted Version in the educational institution’s repository after the following applicable embargo period has expired. See the following website for details: http://olabout.wiley.com/WileyCDA/Section/id-817011.html.
D. CONTRIBUTIONS OWNED BY EMPLOYER

If the Contribution was written by the Contributor in the course of the Contributor's employment (as a "work-made-for-hire" in the course of employment), the Contribution is owned by the company/institution which must execute this Agreement (in addition to the Contributor's signature). In such case, the company/institution hereby assigns to the Owner, during the full term of copyright, all copyright in and to the Contribution for the full term of copyright throughout the world as specified in Section A above.

E. GOVERNMENT CONTRACTS

In the case of a Contribution prepared under U.S. Government contract or grant, the U.S. Government may reproduce, without charge, all or portions of the Contribution and may authorize others to do so, for official U.S. Government purposes only, if the U.S. Government contract or grant so requires. (U.S. Government, U.K. Government, and other government employees: see notes at end.)

F. CONTRIBUTOR'S REPRESENTATIONS

The Contributor represents that the Contribution is the Contributor's original work, all individuals identified as Contributors actually contributed to the Contribution, and all individuals who contributed are included. The Contribution is submitted only to this Journal and has not been published before. (If excerpts from copyrighted works owned by third parties are included, the Contributor will obtain written permission from the copyright owners for all uses as set forth in the Journal's Instructions for Contributors, and show credit to the sources in the Contribution.) The Contributor also warrants that the Contribution contains no libelous or unlawful statements, does not infringe upon the rights (including without limitation the copyright, patent or trademark rights) or the privacy of others, or contain material or instructions that might cause harm or injury. Upon request, Contributor will provide the data or will cooperate fully in obtaining and providing the data on which the Contribution is based for examination by the editors or their assignees.

G. FINANCIAL DISCLOSURES

The Contributor certifies that his/her financial and material support for this research and work, regardless of date, is clearly identified on Exhibit A to this Agreement. The Contributor has also identified on Exhibit A, all other support unrelated to this research, covering the past year from the date of submission (e.g., grants, advisory boards, employment, consultancies, contracts, honoraria, royalties, expert testimony, partnerships, or stock ownership in medically-related fields).

H. VIDEO AND PHOTOGRAPHY CONSENT

In the event that the Contribution includes, discloses or incorporates any content (including, without limitation, any video clip or photograph) which identifies any individual patient(s) ("patient identifiable content"), the Contributor obtained from such patient(s) written consent to such inclusion, disclosure or incorporation and that this consent fully complies with all legal requirements, including without limitation, all of the requirements of the laws of the jurisdiction(s) to which the patient(s) and the patient(s)' physician are subject, including the United States Health Insurance Portability and Accountability Act of 1996 ("HIPAA") if applicable. The Contributor hereby certifies that, if the patient consent form is in a language other than English, such consent form meets all of the requirements set forth in the Instructions to Authors. In addition, the Contributor hereby confirms that he/she obtained from patient(s) written consent to use the patient identifiable content in both print and online (i.e., internet/web-based) publication formats. The Contributor further certifies that the person executing any such patient consent form, to the best of his/her knowledge, had legal capacity under applicable law to execute the form on behalf of the patient.
I. ACKNOWLEDGEMENTS

The Contributor should obtain written permission from all individuals named in the acknowledgement since readers may infer their endorsement of data and conclusions. The Contributor certifies that all individuals named in the acknowledgement section have provided written permission to be named.

J. MISCELLANEOUS

This Agreement may be amended or modified only in a writing executed by both parties. The waiver or failure of any party to exercise any rights under this Agreement shall not be deemed a waiver or other limitation of any other right or any future right. This Agreement shall inure to the benefit of, and shall be binding upon, the parties, their respective successors and permitted assigns. This Agreement may be executed in two (2) or more counterparts, each of which shall be an original and all of which taken together shall constitute one and the same agreement. Executed copies of this Agreement may be delivered by facsimile transmission, pdf/email or other comparable electronic means. If for any reason any provision of this Agreement shall be deemed by a court of competent jurisdiction to be legally invalid or unenforceable, the validity, legality and enforceability of the remainder of this Agreement shall not be affected and such provision shall be deemed modified to the minimum extent necessary to make such provision consistent with applicable law and, in its modified form, such provision shall then be enforceable and enforced. The parties agree to do such further acts and to execute and deliver such additional agreements and instruments from time to time as either may at any time reasonably request in order to assure and confirm unto such requesting party the rights, powers and remedies conferred in the Agreement. This Agreement, including any exhibits attached hereto, contains the entire agreement and understanding of the parties with respect to the subject matter hereof, and supersedes all prior agreements, negotiations, representations and proposals, written and oral, relating thereto.

All Contributors must sign below. Contributors must check one box except that NIH grantees should check both Contributor-owned work and the NIH grantee box. If your Contribution was written during the course of employment, your employer must also sign where indicated.

Please send your original completed and signed forms by fax or email a scanned copy to the Journal production editor. For production editor contact details please visit the Journal’s online author guidelines. Do not send in hard copies of these forms.

[ ] Contributor-owned work

[ ] NIH grantee

[ ] Both

__[ ]__ Contributor’s signature ________________

Type or print name and title

_0. SUCHOWERSKY

Date ________________

Co-Contributor’s signature ________________

Type or print name and title

Date ________________
Exhibit A

Financial Disclosure

The Contributor has received financial and material support for this research and work regardless of date from the following sources:

Name: Dr. O. Suchowski
Address: U of Alberta, Edmonton, Canada
Type of support: NIH Grant

This material will be printed with the published article.

In the past year from the date of submission, the Contributor has also received the following support unrelated to this research (e.g., grants, advisory boards, employment, consultancies, contracts, honoraria, royalties, expert testimony, partnerships, or stock ownership in medically-related fields):

Name: Dr. O. Suchowski
Address: U of Alberta, Edmonton, Canada
Type of support: 

This material will be posted on the journal website and may be printed at the Editors’ discretion.

ATTACH ADDITIONAL INFORMATION AS NECESSARY
1) Royalties - Up To Date
2) Research Grants
   Wave Life Sciences
   Roche
COPYRIGHT TRANSFER AGREEMENT

Date: 4/12/2021

Contributor name: Shirley W. Eberly

Contributor address: Univ. of Rochester Medical Center, Rochester NY 14642

Manuscript number: MDS-21-0030

Re: Manuscript entitled: Longitudinal change in Neuro-Qol measures over 3 years in early Parkinson's disease for publication in: Movement Disorders (the “Journal”)

Published by Wiley on behalf of The International Parkinson and Movement Disorder Society (the “Owner”)

Dear Contributor(s):

Thank you for submitting your Contribution for publication. In order to expedite the editing and publishing process and enable the Owner to disseminate your Contribution to the fullest extent, we need to have this Copyright Transfer Agreement executed. If the Contribution is not accepted for publication, or if the Contribution is subsequently rejected, this Agreement shall be null and void. Publication cannot proceed without a signed copy of this Agreement.

A. COPYRIGHT

The Contributor assigns to the Owner, during the full term of copyright and any extensions or renewals, all copyright in and to the Contribution, and all rights therein, including but not limited to the right to reproduce, publish, republish, transmit, sell, transfer, distribute, and otherwise use the Contribution in whole or in part in electronic and print editions of the Journal and in derivative works throughout the world, in all languages and in all media of expression now known or later developed, and to license or permit others to do so.

B. RETAINED RIGHTS

Notwithstanding the above, the Contributor or, if applicable, the Contributor’s employer, retains all proprietary rights other than copyright, such as patent rights, in any process, procedure or article of manufacture described in the Contribution. This reservation of rights does not affect or limit the rights assigned to Owner in Section A.

C. PERMITTED USES BY CONTRIBUTOR

1. License. The Owner grants to Contributor a non-exclusive, non-transferable and limited license to reproduce and distribute copies of the print or electronic “preprints” of the unpublished Contribution, in the original form submitted to the Journal prior to the peer review process, solely to colleagues within the Contributor’s nonprofit organization or educational institution. The Contributor shall make no more than 100 printed copies of the preprints in any calendar year. Such preprints may be posted as electronic files on the Contributor’s own personal website, on the Contributor’s internal intranet at Contributor’s nonprofit organization or educational institution, or on a secure external website at the Contributor’s nonprofit organization or educational institution, provided that access is limited to employees and/or students at Contributor’s non-profit organization or educational institution. Contributor shall not charge a fee for any
preprints, and Contributor's use under this Section C shall not be for any commercial purpose, or for any systematic external distribution (e.g., posting on a listserv, public website, database connected to a public access server, or automated delivery system). The license grant in this Section does not apply to for-profit corporations, and any proposed use outside of the scope of this Section C must be pre-approved in writing by the Owner. The rights granted to Contributor under this Section C do not include reproduction, distribution or any other use of rating scales, videos or other audiovisual materials associated with the Contribution.

2. Required Citation. Prior to publication, the Contributor must provide full credit and acknowledgement of the Journal in all preprints in the following format: This is a preprint of an article accepted for publication in [Journal Title], Copyright © [year] The International Parkinson and Movement Disorder Society. After publication, the Contributor must provide a citation to the Journal in all preprints in the following format: This is a preprint of an article that was published in [Journal title]: (Title of Article, Contributor, Journal Title and Volume/ Issue, Copyright © [year] The International Parkinson and Movement Disorder Society). An electronic link must be provided to the Journal's website, located at http://www.interscience.wiley.com. The Contributor agrees not to update the preprint or replace it with the published version of the Contribution.

3. Accepted Version. Re-use of the accepted and peer-reviewed (but not the final typeset published) version of the Contribution (the "Accepted Version") is not permitted under this Agreement. There are separate arrangements with certain funding agencies governing reuse of the Accepted Version. Additional terms apply if the Contributor receives or received funding from these agencies. The details of those relationships, and other offerings allowing open web use, are set forth at the following website: http://www.wiley.com/go/funderstatement.

4. Additional Terms for Certain Funders. Certain funders, including the NIH, members of the Research Councils UK (RCUK) and Wellcome Trust require deposit of the Accepted Version in a public repository after an embargo period. Details of funding arrangements are set out at the following website: http://www.wiley.com/go/funderstatement. Additional terms may be applicable. Please contact the production editor for the journal at MDSprod@wiley.com if you have additional funding requirements.

If any Contributor receiving funds from applicable sources does not choose the Owner's OnlineOpen option, the Contributor will be allowed to self-archive by depositing the Accepted Version in a public repository after the following applicable embargo period has expired, subject to further conditions imposed by the RCUK:

   a. 12 months from first publication online of the final published version of the Contribution for research funded by members of the Research Councils UK (RCUK) other than The Economic and Social Research Council (ESRC) and the Arts and Humanities Research Council (AHRC);
   b. 24 months from first publication online of the final published version of the Contribution for research funded by ESRC or AHRC.

5. Additional Terms for Certain Institutions. Wiley has arrangements with certain educational institutions to permit the deposit of the Accepted Version in the institutional repository after an embargo period. Details of such arrangements are set out at the following website: http://olabout.wiley.com/WileyCDA/Section/id-406074.html. Additional terms may be applicable.

If any Contributor affiliated with these applicable educational institutions does not choose the Owner's OnlineOpen option, the Contributor will be allowed to self-archive by depositing the Accepted Version in the educational institution's repository after the following applicable embargo period has expired. See the following website for details: http://olabout.wiley.com/WileyCDA/Section/id-817011.html.
D. CONTRIBUTIONS OWNED BY EMPLOYER

If the Contribution was written by the Contributor in the course of the Contributor’s employment (as a “work-made-for-hire” in the course of employment), the Contribution is owned by the company/institution which must execute this Agreement (in addition to the Contributor’s signature). In such case, the company/institution hereby assigns to the Owner, during the full term of copyright, all copyright in and to the Contribution for the full term of copyright throughout the world as specified in Section A above.

E. GOVERNMENT CONTRACTS

In the case of a Contribution prepared under U.S. Government contract or grant, the U.S. Government may reproduce, without charge, all or portions of the Contribution and may authorize others to do so, for official U.S. Government purposes only, if the U.S. Government contract or grant so requires. (U.S. Government, U.K. Government, and other government employees: see notes at end.)

F. CONTRIBUTOR’S REPRESENTATIONS

The Contributor represents that the Contribution is the Contributor’s original work, all individuals identified as Contributors actually contributed to the Contribution, and all individuals who contributed are included. The Contribution is submitted only to this Journal and has not been published before. (If excerpts from copyrighted works owned by third parties are included, the Contributor will obtain written permission from the copyright owners for all uses as set forth in the Journal’s Instructions for Contributors, and show credit to the sources in the Contribution.) The Contributor also warrants that the Contribution contains no libelous or unlawful statements, does not infringe upon the rights (including without limitation the copyright, patent or trademark rights) or the privacy of others, or contain material or instructions that might cause harm or injury. Upon request, Contributor will provide the data or will cooperating fully in obtaining and providing the data on which the Contribution is based for examination by the editors or their assignees.

G. FINANCIAL DISCLOSURES

The Contributor certifies that his/her financial and material support for this research and work, regardless of date, is clearly identified on Exhibit A to this Agreement. The Contributor has also identified on Exhibit A, all other support unrelated to this research, covering the past year from the date of submission (e.g., grants, advisory boards, employment, consultancies, contracts, honoraria, royalties, expert testimony, partnerships, or stock ownership in medically-related fields).

H. VIDEO AND PHOTOGRAPHY CONSENT

In the event that the Contribution includes, discloses or incorporates any content (including, without limitation, any video clip or photograph) which identifies any individual patient(s) (“patient identifiable content”), the Contributor obtained from such patient(s) written consent to such inclusion, disclosure or incorporation and that such consent fully complies with all legal requirements, including without limitation, all of the requirements of the laws of the jurisdiction(s) to which the patient(s) and the patient(s)’ physician are subject, including the United States Health Insurance Portability and Accountability Act of 1996 (“HIPAA”) if applicable. The Contributor hereby certifies that, if the patient consent form is in a language other than English, such consent form meets all of the requirements set forth in the Instructions to Authors. In addition, the Contributor hereby confirms that he/she obtained from patient(s) written consent to use the patient identifiable content in both print and online (i.e., internet/web-based) publication formats. The Contributor further certifies that the person executing any such patient consent form, to the best of his/her knowledge, had legal capacity under applicable law to execute the form on behalf of the patient.
I. ACKNOWLEDGEMENTS

The Contributor should obtain written permission from all individuals named in the acknowledgement since readers may infer their endorsement of data and conclusions. The Contributor certifies that all individuals named in the acknowledgement section have provided written permission to be named.

J. MISCELLANEOUS

This Agreement may be amended or modified only in a writing executed by both parties. The waiver or failure of any party to exercise any rights under this Agreement shall not be deemed a waiver or other limitation of any other right or any future right. This Agreement shall inure to the benefit of, and shall be binding upon, the parties, their respective successors and permitted assigns. This Agreement may be executed in two (2) or more counterparts, each of which shall be an original and all of which taken together shall constitute one and the same agreement. Executed copies of this Agreement may be delivered by facsimile transmission, pdf/email or other comparable electronic means. If for any reason any provision of this Agreement shall be deemed by a court of competent jurisdiction to be legally invalid or unenforceable, the validity, legality and enforceability of the remainder of this Agreement shall not be affected and such provision shall be deemed modified to the minimum extent necessary to make such provision consistent with applicable law and, in its modified form, such provision shall then be enforceable and enforced. The parties agree to do such further acts and to execute and deliver such additional agreements and instruments from time to time as either may at any time reasonably request in order to assure and confirm unto such requesting party the rights, powers and remedies conferred in the Agreement. This Agreement, including any exhibits attached hereto, contains the entire agreement and understanding of the parties with respect to the subject matter hereof, and supersedes all prior agreements, negotiations, representations and proposals, written and oral, relating thereto.

All Contributors must sign below. Contributors must check one box except that NIH grantees should check both Contributor-owned work and the NIH grantee box. If your Contribution was written during the course of employment, your employer must also sign where indicated.

Please send your original completed and signed forms by fax or email a scanned copy to the Journal production editor. For production editor contact details please visit the Journal’s online author guidelines. Do not send in hard copies of these forms.

[ ] Contributor-owned work

Contributor's signature

Shirley W. Eberly

Date

Type or print name and title

Co-Contributor’s signature

Date

Type or print name and title
Company/Institution-owned Work (made-for-hire in the Course of employment)  
Company or Institution (Employer-for-Hire)  
Date

Authorized signature of Employer  
Date

Contributor's signature  
Date

Type or print name and title

ATTACH ADDITIONAL SIGNATURE PAGES AS NECESSARY

[_____] U.S. Government work  
Note to U.S. Government Employees  
A contribution prepared by a U.S. federal government employee as part of the employee's official duties, or which is an official U.S. Government publication, is called a "U.S. Government work", and is in the public domain in the United States. In such case, Paragraph A.1 will not apply but the Contributor must type his/her name (in the Contributor's signature line) above. Contributor acknowledges that the Contribution will be published in the United States and other countries. If the Contribution was not prepared as part of the employee's duties or is not an official U.S. Government publication, it is not a U.S. Government work.

[_____] U.K. Government work (Crown Copyright)  
Note to U.K. Government Employees  
The rights in a contribution prepared by an employee of a UK government department, agency or other Crown body as part of his/her official duties, or which is an official government publication, belong to the Crown. Contributors must ensure they comply with departmental regulations and submit the appropriate authorisation to publish. If your status as a government employee legally prevents you from signing this Agreement, please contact the Journal production editor.

[_____] Other  
Including Other Government work or Non-Governmental Organisation work  
Note to Non-U.S., Non-U.K. Government Employees or Non-Governmental Organisation Employees  
If your status as a government or non-governmental organisation employee legally prevents you from signing this Agreement, please contact the Journal production editor.
Exhibit A

Financial Disclosure

The Contributor has received financial and material support for this research and work regardless of date from the following sources:

Name: 
Address: 
Type of support: 

This material will be printed with the published article.

In the past year from the date of submission, the Contributor has also received the following support unrelated to this research (e.g., grants, advisory boards, employment, consultancies, contracts, honoraria, royalties, expert testimony, partnerships, or stock ownership in medically-related fields):

Name: NIH
Address: 
Type of support: Research Support

This material will be posted on the journal website and may be printed at the Editors’ discretion.

ATTACH ADDITIONAL INFORMATION AS NECESSARY

Additional Research Support from 
Vaccinex Pharmaceuticals
Michael J. Fox Foundation
Grey Matter Technologies
COPYRIGHT TRANSFER AGREEMENT

Date: \( \text{4/19/2021} \)

Contributor name: \text{ERIC S. FARBERMAN} \n
Contributor address: \text{Reno, University of Health Sciences, Los Angeles, NV} \n
Manuscript number: \text{MDS-21-0030} \n
Re: Manuscript entitled: \text{Longitudinal change in Neuro-Qol measures over 3 years in early Parkinson's disease} (the "Contribution")

for publication in: \text{Movement Disorders} (the "Journal")

Published by Wiley on behalf of The International Parkinson and Movement Disorder Society (the "Owner")

Dear Contributor(s):

Thank you for submitting your Contribution for publication. In order to expedite the editing and publishing process and enable the Owner to disseminate your Contribution to the fullest extent, we need to have this Copyright Transfer Agreement executed. If the Contribution is not accepted for publication, or if the Contribution is subsequently rejected, this Agreement shall be null and void. \text{Publication cannot proceed without a signed copy of this Agreement.}

A. COPYRIGHT

The Contributor assigns to the Owner, during the full term of copyright and any extensions or renewals, all copyright in and to the Contribution, and all rights therein, including but not limited to the right to reproduce, publish, republish, transmit, sell, transfer, distribute, and otherwise use the Contribution in whole or in part in electronic or print editions of the Journal and in derivative works throughout the world, in all languages and in all media of expression now known or later developed, and to license or permit others to do so.

B. RETAINED RIGHTS

Notwithstanding the above, the Contributor or, if applicable, the Contributor's employer, retains all proprietary rights other than copyright, such as patent rights, in any process, procedure or article of manufacture described in the Contribution. This reservation of rights does not affect or limit the rights assigned to Owner in Section A.

C. PERMITTED USES BY CONTRIBUTOR

1. License. The Owner grants to Contributor a non-exclusive, non-transferable and limited license to reproduce and distribute copies of the print or electronic "preprints" of the unpublished Contribution, in the original form submitted to the Journal prior to the peer review process, solely to colleagues within the Contributor's nonprofit organization or educational institution. The Contributor shall make no more than 100 printed copies of the preprints in any calendar year. Such preprints may be posted as electronic files on the Contributor's own personal website, on the Contributor's internal intranet at Contributor's nonprofit organization or educational institution, or on a secure external website at the Contributor's nonprofit organization or educational institution, provided that access is limited to employees and/or students at Contributor's non-profit organization or educational institution. Contributor shall not charge a fee for any
preprints, and Contributor’s use under this Section C shall not be for any commercial purpose, or for any systematic external distribution (e.g., posting on a listserv, public website, database connected to a public access server, or automated delivery system). The license grant in this Section does not apply to for-profit corporations, and any proposed use outside of the scope of this Section C must be pre-approved in writing by the Owner. The rights granted to Contributor under this Section C do not include reproduction, distribution or any other use of rating scales, videos or other audiovisual materials associated with the Contribution.

2. Required Citation. Prior to publication, the Contributor must provide full credit and acknowledgement of the Journal in all preprints in the following format: This is a preprint of an article accepted for publication in [Journal Title], Copyright © [year] The International Parkinson and Movement Disorder Society. After publication, the Contributor must provide a citation to the Journal in all preprints in the following format: This is a preprint of an article that was published in [Journal title]: (Title of Article, Contributor, Journal Title and Volume/Issue, Copyright © [year] The International Parkinson and Movement Disorder Society). An electronic link must be provided to the Journal’s website, located at http://www.interscience.wiley.com. The Contributor agrees not to update the preprint or replace it with the published version of the Contribution.

3. Accepted Version. Re-use of the accepted and peer-reviewed (but not the final typeset published) version of the Contribution (the “Accepted Version”) is not permitted under this Agreement. There are separate arrangements with certain funding agencies governing reuse of the Accepted Version. Additional terms apply if the Contributor receives or received funding from these agencies. The details of those relationships, and other offerings allowing open web use, are set forth at the following website: http://www.wiley.com/go/funderstatement.

4. Additional Terms for Certain Funders. Certain funders, including the NIH, members of the Research Councils UK (RCUK) and Wellcome Trust require deposit of the Accepted Version in a public repository after an embargo period. Details of funding arrangements are set out at the following website: http://www.wiley.com/go/funderstatement. Additional terms may be applicable. Please contact the production editor for the journal at MDSprod@wiley.com if you have additional funding requirements.

If any Contributor receiving funds from applicable sources does not choose the Owner’s OnlineOpen option, the Contributor will be allowed to self-archive by depositing the Accepted Version in a public repository after the following applicable embargo period has expired, subject to further conditions imposed by the RCUK:

- a. 12 months from first publication online of the final published version of the Contribution for research funded by members of the Research Councils UK (RCUK) other than The Economic and Social Research Council (ESRC) and the Arts and Humanities Research Council (AHRC); or
- b. 24 months from first publication online of the final published version of the Contribution for research funded by ESRC or AHRC.

5. Additional Terms for Certain Institutions. Wiley has arrangements with certain educational institutions to permit the deposit of the Accepted Version in the institutional repository after an embargo period. Details of such arrangements are set out at the following website: http://olabout.wiley.com/WileyCDA/Section/id-406074.html. Additional terms may be applicable.

If any Contributor affiliated with these applicable educational institutions does not choose the Owner’s OnlineOpen option, the Contributor will be allowed to self-archive by depositing the Accepted Version in the educational institution’s repository after the following applicable embargo period has expired. See the following website for details: http://olabout.wiley.com/WileyCDA/Section/id-817011.html.
D. CONTRIBUTIONS OWNED BY EMPLOYER

If the Contribution was written by the Contributor in the course of the Contributor’s employment (as a “work-made-for-hire” in the course of employment), the Contribution is owned by the company/institution which must execute this Agreement (in addition to the Contributor’s signature). In such case, the company/institution hereby assigns to the Owner, during the full term of copyright, all copyright in and to the Contribution for the full term of copyright throughout the world as specified in Section A above.

E. GOVERNMENT CONTRACTS

In the case of a Contribution prepared under U.S. Government contract or grant, the U.S. Government may reproduce, without charge, all or portions of the Contribution and may authorize others to do so, for official U.S. Government purposes only, if the U.S. Government contract or grant so requires. (U.S. Government, U.K. Government, and other government employees: see notes at end.)

F. CONTRIBUTOR’S REPRESENTATIONS

The Contributor represents that the Contribution is the Contributor’s original work, all individuals identified as Contributors actually contributed to the Contribution, and all individuals who contributed are included. The Contribution is submitted only to this Journal and has not been published before. (If excerpts from copyrighted works owned by third parties are included, the Contributor will obtain written permission from the copyright owners for all uses as set forth in the Journal’s Instructions for Contributors, and show credit to the sources in the Contribution.) The Contributor also warrants that the Contribution contains no libelous or unlawful statements, does not infringe upon the rights (including without limitation the copyright, patent or trademark rights) or the privacy of others, or contain material or instructions that might cause harm or injury. Upon request, Contributor will provide the data or will cooperating fully in obtaining and providing the data on which the Contribution is based for examination by the editors or their assignees.

G. FINANCIAL DISCLOSURES

The Contributor certifies that his/her financial and material support for this research and work, regardless of date, is clearly identified on Exhibit A to this Agreement. The Contributor has also identified on Exhibit A, all other support unrelated to this research, covering the past year from the date of submission (e.g., grants, advisory boards, employment, consultancies, contracts, honoraria, royalties, expert testimony, partnerships, or stock ownership in medically-related fields).

H. VIDEO AND PHOTOGRAPHY CONSENT

In the event that the Contribution includes, discloses or incorporates any content (including, without limitation, any video clip or photograph) which identifies any individual patient(s) (“patient identifiable content”), the Contributor obtained from such patient(s) written consent to such inclusion, disclosure or incorporation and that this consent fully complies with all legal requirements, including without limitation, all of the requirements of the laws of the jurisdiction(s) to which the patient(s) and the patient(s)’ physician are subject, including the United States Health Insurance Portability and Accountability Act of 1996 (“HIPAA”) if applicable. The Contributor hereby certifies that, if the patient consent form is in a language other than English, such consent form meets all of the requirements set forth in the Instructions to Authors. In addition, the Contributor hereby confirms that he/she obtained from patient(s) written consent to use the patient identifiable content in both print and online (i.e., internet/web-based) publication formats. The Contributor further certifies that the person executing any such patient consent form, to the best of his/her knowledge, had legal capacity under applicable law to execute the form on behalf of the patient.
I. ACKNOWLEDGEMENTS

The Contributor should obtain written permission from all individuals named in the acknowledgement since readers may infer their endorsement of data and conclusions. The Contributor certifies that all individuals named in the acknowledgement section have provided written permission to be named.

J. MISCELLANEOUS

This Agreement may be amended or modified only in a writing executed by both parties. The waiver or failure of any party to exercise any rights under this Agreement shall not be deemed a waiver or other limitation of any other right or any future right. This Agreement shall inure to the benefit of, and shall be binding upon, the parties, their respective successors and permitted assigns. This Agreement may be executed in two (2) or more counterparts, each of which shall be an original and all of which taken together shall constitute one and the same agreement. Executed copies of this Agreement may be delivered by facsimile transmission, pdf/email or other comparable electronic means. If for any reason any provision of this Agreement shall be deemed by a court of competent jurisdiction to be legally invalid or unenforceable, the validity, legality and enforceability of the remainder of this Agreement shall not be affected and such provision shall be deemed modified to the minimum extent necessary to make such provision consistent with applicable law and, in its modified form, such provision shall then be enforceable and enforced. The parties agree to do such further acts and to execute and deliver such additional agreements and instruments from time to time as either may at any time reasonably request in order to assure and confirm unto such requesting party the rights, powers and remedies conferred in the Agreement. This Agreement, including any exhibits attached hereto, contains the entire agreement and understanding of the parties with respect to the subject matter hereof, and supersedes all prior agreements, negotiations, representations and proposals, written and oral, relating thereto.

All Contributors must sign below. Contributors must check one box except that NIH grantees should check both Contributor-owned work and the NIH grantee box. If your Contribution was written during the course of employment, your employer must also sign where indicated.

Please send your original completed and signed forms by fax or email a scanned copy to the Journal production editor. For production editor contact details please visit the Journal’s online author guidelines. Do not send in hard copies of these forms.

[ ] Contributor-owned work

Contributor’s signature

Eve S. Fehrenz, MD, FAAN

Date

Type or print name and title

Co-Contributor’s signature

Date

Type or print name and title
[_____] Company/Institution-owned Work (made-for-hire in the Course of employment)  
Company or Institution (Employer-for-Hire)  
Date

Authorized signature of Employer  
Date

Contributor’s signature  
Date

Type or print name and title

ATTACH ADDITIONAL SIGNATURE PAGES AS NECESSARY

[_____] U.S. Government work
Note to U.S. Government Employees
A contribution prepared by a U.S. federal government employee as part of the employee's official duties, or which is an official U.S. Government publication, is called a "U.S. Government work", and is in the public domain in the United States. In such case, Paragraph A.1 will not apply but the Contributor must type his/her name (in the Contributor's signature line) above. Contributor acknowledges that the Contribution will be published in the United States and other countries. If the Contribution was not prepared as part of the employee's duties or is not an official U.S. Government publication, it is not a U.S. Government work.

[_____] U.K. Government work (Crown Copyright)
Note to U.K. Government Employees
The rights in a contribution prepared by an employee of a UK government department, agency or other Crown body as part of his/her official duties, or which is an official government publication, belong to the Crown. Contributors must ensure they comply with departmental regulations and submit the appropriate authorisation to publish. If your status as a government employee legally prevents you from signing this Agreement, please contact the Journal production editor.

[_____] Other
Including Other Government work or Non-Governmental Organisation work
Note to Non-U.S., Non-U.K. Government Employees or Non-Governmental Organisation Employees
If your status as a government or non-governmental organisation employee legally prevents you from signing this Agreement, please contact the Journal production editor.
Exhibit A

Financial Disclosure

The Contributor has received financial and material support for this research and work regardless of date from the following sources:

Name: Parkinson Study Group
Address: Boston, MA
Type of support: Research Site

This material will be printed with the published article.

In the past year from the date of submission, the Contributor has also received the following support unrelated to this research (e.g., grants, advisory boards, employment, consultancies, contracts, honoraria, royalties, expert testimony, partnerships, or stock ownership in medically-related fields):

Name: US World Meds
Address: Louisville, KY
Type of support: Advisory Board

This material will be posted on the journal website and may be printed at the Editors’ discretion.

ATTACH ADDITIONAL INFORMATION AS NECESSARY

Name: Acorda Therapeutics
Address: Ardsley, NY
Type of Support: Advisory Board
COPYRIGHT TRANSFER AGREEMENT

Date: 4/1/21

Contributor name: Lisa M. Shulman MD

Contributor address: 110 S. Paca St, Baltimore, MD 21201

Manuscript number: MDS-21-0030

Re: Manuscript entitled: Longitudinal change in Neuro-Qol measures over 3 years in early Parkinson’s disease

for publication in: Movement Disorders (the “Journal”)

Published by Wiley on behalf of The International Parkinson and Movement Disorder Society (the “Owner”)

Dear Contributor(s):

Thank you for submitting your Contribution for publication. In order to expedite the editing and publishing process and enable the Owner to disseminate your Contribution to the fullest extent, we need to have this Copyright Transfer Agreement executed. If the Contribution is not accepted for publication, or if the Contribution is subsequently rejected, this Agreement shall be null and void. Publication cannot proceed without a signed copy of this Agreement.

A. COPYRIGHT

The Contributor assigns to the Owner, during the full term of copyright and any extensions or renewals, all copyright in and to the Contribution, and all rights therein, including but not limited to the right to reproduce, publish, republish, transmit, sell, transfer, distribute, and otherwise use the Contribution in whole or in part in electronic and print editions of the Journal and in derivative works throughout the world, in all languages and in all media of expression now known or later developed, and to license or permit others to do so.

B. RETAINED RIGHTS

Notwithstanding the above, the Contributor or, if applicable, the Contributor’s employer, retains all proprietary rights other than copyright, such as patent rights, in any process, procedure or article of manufacture described in the Contribution. This reservation of rights does not affect or limit the rights assigned to Owner in Section A.

C. PERMITTED USES BY CONTRIBUTOR

1. License. The Owner grants to Contributor a non-exclusive, non-transferable and limited license to reproduce and distribute copies of the print or electronic “preprints” of the unpublished Contribution, in the original form submitted to the Journal prior to the peer review process, solely to colleagues within the Contributor’s nonprofit organization or educational institution. The Contributor shall make no more than 100 printed copies of the preprints in any calendar year. Such preprints may be posted as electronic files on the Contributor’s own personal website, on the Contributor’s internal intranet at Contributor’s nonprofit organization or educational institution, or on a secure external website at the Contributor’s nonprofit organization or educational institution, provided that access is limited to employees and/or students at Contributor’s non-profit organization or educational institution. Contributor shall not charge a fee for any
I. ACKNOWLEDGEMENTS

The Contributor should obtain written permission from all individuals named in the acknowledgement since readers may infer their endorsement of data and conclusions. The Contributor certifies that all individuals named in the acknowledgement section have provided written permission to be named.

J. MISCELLANEOUS

This Agreement may be amended or modified only in a writing executed by both parties. The waiver or failure of any party to exercise any rights under this Agreement shall not be deemed a waiver or other limitation of any other right or any future right. This Agreement shall inure to the benefit of, and shall be binding upon, the parties, their respective successors and permitted assigns. This Agreement may be executed in two (2) or more counterparts, each of which shall be an original and all of which taken together shall constitute one and the same agreement. Executed copies of this Agreement may be delivered by facsimile transmission, pdf/email or other comparable electronic means. If for any reason any provision of this Agreement shall be deemed by a court of competent jurisdiction to be legally invalid or unenforceable, the validity, legality and enforceability of the remainder of this Agreement shall not be affected and such provision shall be deemed modified to the minimum extent necessary to make such provision consistent with applicable law and, in its modified form, such provision shall then be enforceable and enforced. The parties agree to do such further acts and to execute and deliver such additional agreements and instruments from time to time as either may at any time reasonably request in order to assure and confirm unto such requesting party the rights, powers and remedies conferred in the Agreement. This Agreement, including any exhibits attached hereto, contains the entire agreement and understanding of the parties with respect to the subject matter hereof, and supersedes all prior agreements, negotiations, representations and proposals, written and oral, relating thereto.

All Contributors must sign below. Contributors must check one box except that NIH grantees should check both Contributor-owned work and the NIH grantee box. If your Contribution was written during the course of employment, your employer must also sign where indicated.

Please send your original completed and signed forms by fax or email a scanned copy to the Journal production editor. For production editor contact details please visit the Journal's online author guidelines. Do not send in hard copies of these forms.

[ ] Contributor-owned work

[ ] NIH grantee

Contributor's signature:

Lisa M. Shulman MD, Professor of Neurology

Type or print name and title:

Co-Contributor's signature:

Type or print name and title:

Date:

4/11/24
Exhibit A

Financial Disclosure

The Contributor has received financial and material support for this research and work regardless of date from the following sources:

Name: Lisa M. Shi, MD
Address: 110 S. Paco St, Baltimore MD 21201
Type of support: NIH Funding as an investigator in the STEADY-PO study.

This material will be printed with the published article.

In the past year from the date of submission, the Contributor has also received the following support unrelated to this research (e.g., grants, advisory boards, employment, consultancies, contracts, honoraria, royalties, expert testimony, partnerships, or stock ownership in medically-related fields):

Name: ____________________________
Address: __________________________
Type of support: ____________________

This material will be posted on the journal website and may be printed at the Editors’ discretion.

ATTACH ADDITIONAL INFORMATION AS NECESSARY
COPYRIGHT TRANSFER AGREEMENT

4/19/2021

Date: __________________________

Contributor name: Matthew Halverson

Contributor address: 1281 9th Ave Unit 1011, San Diego, CA 92101

Manuscript number: MDS-21-0030

Re: Manuscript entitled: Longitudinal change in Neuro-Qol measures over 3 years in early Parkinson’s disease

Published by Wiley on behalf of The International Parkinson and Movement Disorder Society (the “Owner”)

Dear Contributor(s):

Thank you for submitting your Contribution for publication. In order to expedite the editing and publishing process and enable the Owner to disseminate your Contribution to the fullest extent, we need to have this Copyright Transfer Agreement executed. If the Contribution is not accepted for publication, or if the Contribution is subsequently rejected, this Agreement shall be null and void. Publication cannot proceed without a signed copy of this Agreement.

A. COPYRIGHT

The Contributor assigns to the Owner, during the full term of copyright and any extensions or renewals, all copyright in and to the Contribution, and all rights therein, including but not limited to the right to reproduce, publish, republish, transmit, sell, transfer, distribute, and otherwise use the Contribution in whole or in part in electronic and print editions of the Journal and in derivative works throughout the world, in all languages and in all media of expression now known or later developed, and to license or permit others to do so.

B. RETAINED RIGHTS

Notwithstanding the above, the Contributor or, if applicable, the Contributor’s employer, retains all proprietary rights other than copyright, such as patent rights, in any process, procedure or article of manufacture described in the Contribution. This reservation of rights does not affect or limit the rights assigned to Owner in Section A.

C. PERMITTED USES BY CONTRIBUTOR

1. License. The Owner grants to Contributor a non-exclusive, non-transferable and limited license to reproduce and distribute copies of the print or electronic “preprints” of the unpublished Contribution, in the original form submitted to the Journal prior to the peer review process, solely to colleagues within the Contributor’s nonprofit organization or educational institution. The Contributor shall make no more than 100 printed copies of the preprints in any calendar year. Such preprints may be posted as electronic files on the Contributor’s own personal website, on the Contributor’s internal intranet at Contributor’s nonprofit organization or educational institution, or on a secure external website at the Contributor’s nonprofit organization or educational institution, provided that access is limited to employees and/or students at Contributor’s non-profit organization or educational institution. Contributor shall not charge a fee for any
preprints, and Contributor’s use under this Section C shall not be for any commercial purpose, or for any systematic external distribution (e.g., posting on a listserv, public website, database connected to a public access server, or automated delivery system). The license grant in this Section does not apply to for-profit corporations, and any proposed use outside of the scope of this Section C must be pre-approved in writing by the Owner. The rights granted to Contributor under this Section C do not include reproduction, distribution or any other use of rating scales, videos or other audiovisual materials associated with the Contribution.

2. Required Citation. Prior to publication, the Contributor must provide full credit and acknowledgement of the Journal in all preprints in the following format: This is a preprint of an article accepted for publication in [Journal Title], Copyright © [year] The International Parkinson and Movement Disorder Society. After publication, the Contributor must provide a citation to the Journal in all preprints in the following format: This is a preprint of an article that was published in [Journal title]: (Title of Article, Contributor, Journal Title and Volume/Issue, Copyright © [year] The International Parkinson and Movement Disorder Society). An electronic link must be provided to the Journal’s website, located at http://www.interscience.wiley.com. The Contributor agrees not to update the preprint or replace it with the published version of the Contribution.

3. Accepted Version. Re-use of the accepted and peer-reviewed (but not the final typeset published) version of the Contribution (the “Accepted Version”) is not permitted under this Agreement. There are separate arrangements with certain funding agencies governing reuse of the Accepted Version. Additional terms apply if the Contributor receives or received funding from these agencies. The details of those relationships, and other offerings allowing open web use, are set forth at the following website: http://www.wiley.com/go/funderstatement.

4. Additional Terms for Certain Funders. Certain funders, including the NIH, members of the Research Councils UK (RCUK) and Wellcome Trust require deposit of the Accepted Version in a public repository after an embargo period. Details of funding arrangements are set out at the following website: http://www.wiley.com/go/funderstatement. Additional terms may be applicable. Please contact the production editor for the journal at MDSprod@wiley.com if you have additional funding requirements.

If any Contributor receiving funds from applicable sources does not choose the Owner’s OnlineOpen option, the Contributor will be allowed to self-archive by depositing the Accepted Version in a public repository after the following applicable embargo period has expired, subject to further conditions imposed by the RCUK:

a. 12 months from first publication online of the final published version of the Contribution for research funded by members of the Research Councils UK (RCUK) other than The Economic and Social Research Council (ESRC) and the Arts and Humanities Research Council (AHRC); or
b. 24 months from first publication online of the final published version of the Contribution for research funded by ESRC or AHRC.

5. Additional Terms for Certain Institutions. Wiley has arrangements with certain educational institutions to permit the deposit of the Accepted Version in the institutional repository after an embargo period. Details of such arrangements are set out at the following website: http://olabout.wiley.com/WileyCDA/Section/id-406074.html. Additional terms may be applicable.

If any Contributor affiliated with these applicable educational institutions does not choose the Owner’s OnlineOpen option, the Contributor will be allowed to self-archive by depositing the Accepted Version in the educational institution’s repository after the following applicable embargo period has expired. See the following website for details: http://olabout.wiley.com/WileyCDA/Section/id-817011.html.
D. CONTRIBUTIONS OWNED BY EMPLOYER

If the Contribution was written by the Contributor in the course of the Contributor’s employment (as a “work-made-for-hire” in the course of employment), the Contribution is owned by the company/institution which must execute this Agreement (in addition to the Contributor’s signature). In such case, the company/institution hereby assigns to the Owner, during the full term of copyright, all copyright in and to the Contribution for the full term of copyright throughout the world as specified in Section A above.

E. GOVERNMENT CONTRACTS

In the case of a Contribution prepared under U.S. Government contract or grant, the U.S. Government may reproduce, without charge, all or portions of the Contribution and may authorize others to do so, for official U.S. Government purposes only, if the U.S. Government contract or grant so requires. (U.S. Government, U.K. Government, and other government employees: see notes at end.)

F. CONTRIBUTOR’S REPRESENTATIONS

The Contributor represents that the Contribution is the Contributor’s original work, all individuals identified as Contributors actually contributed to the Contribution, and all individuals who contributed are included. The Contribution is submitted only to this Journal and has not been published before. (If excerpts from copyrighted works owned by third parties are included, the Contributor will obtain written permission from the copyright owners for all uses as set forth in the Journal’s Instructions for Contributors, and show credit to the sources in the Contribution.) The Contributor also warrants that the Contribution contains no libelous or unlawful statements, does not infringe upon the rights (including without limitation the copyright, patent or trademark rights) or the privacy of others, or contain material or instructions that might cause harm or injury. Upon request, Contributor will provide the data or will cooperating fully in obtaining and providing the data on which the Contribution is based for examination by the editors or their assignees.

G. FINANCIAL DISCLOSURES

The Contributor certifies that his/her financial and material support for this research and work, regardless of date, is clearly identified on Exhibit A to this Agreement. The Contributor has also identified on Exhibit A, all other support unrelated to this research, covering the past year from the date of submission (e.g., grants, advisory boards, employment, consultancies, contracts, honoraria, royalties, expert testimony, partnerships, or stock ownership in medically-related fields).

H. VIDEO AND PHOTOGRAPHY CONSENT

In the event that the Contribution includes, discloses or incorporates any content (including, without limitation, any video clip or photograph) which identifies any individual patient(s) (“patient identifiable content”), the Contributor obtained from such patient(s) written consent to such inclusion, disclosure or incorporation and that this consent fully complies with all legal requirements, including without limitation, all of the requirements of the laws of the jurisdiction(s) to which the patient(s) and the patient(s)’ physician are subject, including the United States Health Insurance Portability and Accountability Act of 1996 (“HIPAA”) if applicable. The Contributor hereby certifies that, if the patient consent form is in a language other than English, such consent form meets all of the requirements set forth in the Instructions to Authors. In addition, the Contributor hereby confirms that he/she obtained from patient(s) written consent to use the patient identifiable content in both print and online (i.e., internet/web-based) publication formats. The Contributor further certifies that the person executing any such patient consent form, to the best of his/her knowledge, had legal capacity under applicable law to execute the form on behalf of the patient.
I. ACKNOWLEDGEMENTS

The Contributor should obtain written permission from all individuals named in the acknowledgement since readers may infer their endorsement of data and conclusions. The Contributor certifies that all individuals named in the acknowledgement section have provided written permission to be named.

J. MISCELLANEOUS

This Agreement may be amended or modified only in a writing executed by both parties. The waiver or failure of any party to exercise any rights under this Agreement shall not be deemed a waiver or other limitation of any other right or any future right. This Agreement shall inure to the benefit of, and shall be binding upon, the parties, their respective successors and permitted assigns. This Agreement may be executed in two (2) or more counterparts, each of which shall be an original and all of which taken together shall constitute one and the same agreement. Executed copies of this Agreement may be delivered by facsimile transmission, pdf/email or other comparable electronic means. If for any reason any provision of this Agreement shall be deemed by a court of competent jurisdiction to be legally invalid or unenforceable, the validity, legality and enforceability of the remainder of this Agreement shall not be affected and such provision shall be deemed modified to the minimum extent necessary to make such provision consistent with applicable law and, in its modified form, such provision shall then be enforceable and enforced. The parties agree to do such further acts and to execute and deliver such additional agreements and instruments from time to time as may reasonably request in order to assure and confirm unto such requesting party the rights, powers and remedies conferred in the Agreement. This Agreement, including any exhibits attached hereto, contains the entire agreement and understanding of the parties with respect to the subject matter hereof, and supersedes all prior agreements, negotiations, representations and proposals, written and oral, relating thereto.

All Contributors must sign below. Contributors must check one box except that NIH grantees should check both Contributor-owned work and the NIH grantee box. If your Contribution was written during the course of employment, your employer must also sign where indicated.

Please send your original completed and signed forms by fax or email a scanned copy to the Journal production editor. For production editor contact details please visit the Journal’s online author guidelines. Do not send in hard copies of these forms.

X [_____] Contributor-owned work

<table>
<thead>
<tr>
<th>Contributor’s signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Matthew Halverson</td>
<td></td>
</tr>
</tbody>
</table>

Type or print name and title

<table>
<thead>
<tr>
<th>Co-Contributor’s signature</th>
<th>Date</th>
</tr>
</thead>
</table>

Type or print name and title
<table>
<thead>
<tr>
<th>Type of Work</th>
<th>Company/Institution-owned Work (made-for-hire in the Course of employment)</th>
<th>Company or Institution (Employer-for-Hire)</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Authorized signature of Employer</td>
<td>Date</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Contributor’s signature</td>
<td>Date</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Type or print name and title</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**ATTACH ADDITIONAL SIGNATURE PAGES AS NECESSARY**

<table>
<thead>
<tr>
<th>Type of Work</th>
<th>U.S. Government work</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Note to U.S. Government Employees</td>
</tr>
<tr>
<td></td>
<td>A contribution prepared by a U.S. federal government employee as part of the employee's official duties, or which is an official U.S. Government publication, is called a &quot;U.S. Government work&quot;, and is in the public domain in the United States. In such case, Paragraph A.1 will not apply but the Contributor must type his/her name (in the Contributor's signature line) above. Contributor acknowledges that the Contribution will be published in the United States and other countries. If the Contribution was not prepared as part of the employee's duties or is not an official U.S. Government publication, it is not a U.S. Government work.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Type of Work</th>
<th>U.K. Government work (Crown Copyright)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Note to U.K. Government Employees</td>
</tr>
<tr>
<td></td>
<td>The rights in a contribution prepared by an employee of a UK government department, agency or other Crown body as part of his/her official duties, or which is an official government publication, belong to the Crown. Contributors must ensure they comply with departmental regulations and submit the appropriate authorisation to publish. If your status as a government employee legally prevents you from signing this Agreement, please contact the Journal production editor.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Type of Work</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Including Other Government work or Non-Governmental Organisation work</td>
</tr>
<tr>
<td></td>
<td>Note to Non-U.S., Non-U.K. Government Employees or Non-Governmental Organisation Employees</td>
</tr>
<tr>
<td></td>
<td>If your status as a government or non-governmental organisation employee legally prevents you from signing this Agreement, please contact the Journal production editor.</td>
</tr>
</tbody>
</table>
Exhibit A

Financial Disclosure

The Contributor has received financial and material support for this research and work regardless of date from the following sources:

Name: None
Address: 
Type of support: 

This material will be printed with the published article.

In the past year from the date of submission, the Contributor has also received the following support unrelated to this research (e.g., grants, advisory boards, employment, consultancies, contracts, honoraria, royalties, expert testimony, partnerships, or stock ownership in medically-related fields):

Name: None
Address: 
Type of support: 

This material will be posted on the journal website and may be printed at the Editors’ discretion.

ATTACH ADDITIONAL INFORMATION AS NECESSARY
COPYRIGHT TRANSFER AGREEMENT

Date: 04/15/2021

Contributor name: Jin-Shei Lai

Contributor address: 625 N Michigan Ave, #2100, Chicago, IL 60611

Manuscript number: MDS-21-0030

Re: Manuscript entitled: Longitudinal change in Neuro-Qol measures over 3 years in early Parkinson’s disease

Dear Contributor(s):

Thank you for submitting your Contribution for publication. In order to expedite the editing and publishing process and enable the Owner to disseminate your Contribution to the fullest extent, we need to have this Copyright Transfer Agreement executed. If the Contribution is not accepted for publication, or if the Contribution is subsequently rejected, this Agreement shall be null and void. Publication cannot proceed without a signed copy of this Agreement.

A. COPYRIGHT

The Contributor assigns to the Owner, during the full term of copyright and any extensions or renewals, all copyright in and to the Contribution, and all rights therein, including but not limited to the right to reproduce, publish, republish, transmit, sell, transfer, distribute, and otherwise use the Contribution in whole or in part in electronic and print editions of the Journal and in derivative works throughout the world, in all languages and in all media of expression now known or later developed, and to license or permit others to do so.

B. RETAINED RIGHTS

Notwithstanding the above, the Contributor or, if applicable, the Contributor’s employer, retains all proprietary rights other than copyright, such as patent rights, in any process, procedure or article of manufacture described in the Contribution. This reservation of rights does not affect or limit the rights assigned to Owner in Section A.

C. PERMITTED USES BY CONTRIBUTOR

1. License. The Owner grants to Contributor a non-exclusive, non-transferable and limited license to reproduce and distribute copies of the print or electronic “preprints” of the unpublished Contribution, in the original form submitted to the Journal prior to the peer review process, solely to colleagues within the Contributor’s nonprofit organization or educational institution. The Contributor shall make no more than 100 printed copies of the preprints in any calendar year. Such preprints may be posted as electronic files on the Contributor’s own personal website, on the Contributor’s internal intranet at Contributor’s nonprofit organization or educational institution, or on a secure external website at the Contributor’s nonprofit organization or educational institution, provided that access is limited to employees and/or students at Contributor’s non-profit organization or educational institution. Contributor shall not charge a fee for any
preprints, and Contributor’s use under this Section C shall not be for any commercial purpose, or for any systematic external distribution (e.g., posting on a listserv, public website, database connected to a public access server, or automated delivery system). The license grant in this Section does not apply to for-profit corporations, and any proposed use outside of the scope of this Section C must be pre-approved in writing by the Owner. The rights granted to Contributor under this Section C do not include reproduction, distribution or any other use of rating scales, videos or other audiovisual materials associated with the Contribution.

2. **Required Citation.** Prior to publication, the Contributor must provide full credit and acknowledgement of the Journal in all preprints in the following format: This is a preprint of an article accepted for publication in [Journal Title], Copyright © [year] The International Parkinson and Movement Disorder Society. After publication, the Contributor must provide a citation to the Journal in all preprints in the following format: This is a preprint of an article that was published in [Journal title]:  (Title of Article, Contributor, Journal Title and Volume/ Issue, Copyright © [year] The International Parkinson and Movement Disorder Society). An electronic link must be provided to the Journal’s website, located at http://www.interscience.Wiley.com. The Contributor agrees not to update the preprint or replace it with the published version of the Contribution.

3. **Accepted Version.** Re-use of the accepted and peer-reviewed (but not the final typeset published) version of the Contribution (the “Accepted Version”) is not permitted under this Agreement. There are separate arrangements with certain funding agencies governing reuse of the Accepted Version. Additional terms apply if the Contributor receives or received funding from these agencies. The details of those relationships, and other offerings allowing open web use, are set forth at the following website: http://www.wiley.com/go/funderstatement.

4. **Additional Terms for Certain Funders.** Certain funders, including the NIH, members of the Research Councils UK (RCUK) and Wellcome Trust require deposit of the Accepted Version in a public repository after an embargo period. Details of funding arrangements are set out at the following website: http://www.wiley.com/go/funderstatement. Additional terms may be applicable. Please contact the production editor for the journal at MDSprod@wiley.com if you have additional funding requirements.

If any Contributor receiving funds from applicable sources does not choose the Owner’s OnlineOpen option, the Contributor will be allowed to self-archive by depositing the Accepted Version in a public repository after the following applicable embargo period has expired, subject to further conditions imposed by the RCUK:

a. 12 months from first publication online of the final published version of the Contribution for research funded by members of the Research Councils UK (RCUK) other than The Economic and Social Research Council (ESRC) and the Arts and Humanities Research Council (AHRC); or

b. 24 months from first publication online of the final published version of the Contribution for research funded by ESRC or AHRC.

5. **Additional Terms for Certain Institutions.** Wiley has arrangements with certain educational institutions to permit the deposit of the Accepted Version in the institutional repository after an embargo period. Details of such arrangements are set out at the following website: http://olabout.wiley.com/WileyCDA/Section/id-406074.html. Additional terms may be applicable.

If any Contributor affiliated with these applicable educational institutions does not choose the Owner’s OnlineOpen option, the Contributor will be allowed to self-archive by depositing the Accepted Version in the educational institution’s repository after the following applicable embargo period has expired. See the following website for details: http://olabout.wiley.com/WileyCDA/Section/id-817011.html.
D. CONTRIBUTIONS OWNED BY EMPLOYER

If the Contribution was written by the Contributor in the course of the Contributor’s employment (as a “work-made-for-hire” in the course of employment), the Contribution is owned by the company/institution which must execute this Agreement (in addition to the Contributor’s signature). In such case, the company/institution hereby assigns to the Owner, during the full term of copyright, all copyright in and to the Contribution for the full term of copyright throughout the world as specified in Section A above.

E. GOVERNMENT CONTRACTS

In the case of a Contribution prepared under U.S. Government contract or grant, the U.S. Government may reproduce, without charge, all or portions of the Contribution and may authorize others to do so, for official U.S. Government purposes only, if the U.S. Government contract or grant so requires. (U.S. Government, U.K. Government, and other government employees: see notes at end.)

F. CONTRIBUTOR’S REPRESENTATIONS

The Contributor represents that the Contribution is the Contributor’s original work, all individuals identified as Contributors actually contributed to the Contribution, and all individuals who contributed are included. The Contribution is submitted only to this Journal and has not been published before. (If excerpts from copyrighted works owned by third parties are included, the Contributor will obtain written permission from the copyright owners for all uses as set forth in the Journal’s Instructions for Contributors, and show credit to the sources in the Contribution.) The Contributor also warrants that the Contribution contains no libelous or unlawful statements, does not infringe upon the rights (including without limitation the copyright, patent or trademark rights) or the privacy of others, or contain material or instructions that might cause harm or injury. Upon request, Contributor will provide the data or will cooperating fully in obtaining and providing the data on which the Contribution is based for examination by the editors or their assignees.

G. FINANCIAL DISCLOSURES

The Contributor certifies that his/her financial and material support for this research and work, regardless of date, is clearly identified on Exhibit A to this Agreement. The Contributor has also identified on Exhibit A, all other support unrelated to this research, covering the past year from the date of submission (e.g., grants, advisory boards, employment, consultancies, contracts, honoraria, royalties, expert testimony, partnerships, or stock ownership in medically-related fields).

H. VIDEO AND PHOTOGRAPHY CONSENT

In the event that the Contribution includes, discloses or incorporates any content (including, without limitation, any video clip or photograph) which identifies any individual patient(s) (“patient identifiable content”), the Contributor obtained from such patient(s) written consent to such inclusion, disclosure or incorporation and that this consent fully complies with all legal requirements, including without limitation, all of the requirements of the laws of the jurisdiction(s) to which the patient(s) and the patient(s)’ physician are subject, including the United States Health Insurance Portability and Accountability Act of 1996 (“HIPAA”) if applicable. The Contributor hereby certifies that, if the patient consent form is in a language other than English, such consent form meets all of the requirements set forth in the Instructions to Authors. In addition, the Contributor hereby confirms that he/she obtained from patient(s) written consent to use the patient identifiable content in both print and online (i.e., internet/web-based) publication formats. The Contributor further certifies that the person executing any such patient consent form, to the best of his/her knowledge, had legal capacity under applicable law to execute the form on behalf of the patient.
I. ACKNOWLEDGEMENTS

The Contributor should obtain written permission from all individuals named in the acknowledgement since readers may infer their endorsement of data and conclusions. The Contributor certifies that all individuals named in the acknowledgement section have provided written permission to be named.

J. MISCELLANEOUS

This Agreement may be amended or modified only in a writing executed by both parties. The waiver or failure of any party to exercise any rights under this Agreement shall not be deemed a waiver or other limitation of any other right or any future right. This Agreement shall inure to the benefit of, and shall be binding upon, the parties, their respective successors and permitted assigns. This Agreement may be executed in two (2) or more counterparts, each of which shall be an original and all of which taken together shall constitute one and the same agreement. Executed copies of this Agreement may be delivered by facsimile transmission, pdf/email or other comparable electronic means. If for any reason any provision of this Agreement shall be deemed by a court of competent jurisdiction to be legally invalid or unenforceable, the validity, legality and enforceability of the remainder of this Agreement shall not be affected and such provision shall be deemed modified to the minimum extent necessary to make such provision consistent with applicable law and, in its modified form, such provision shall then be enforceable and enforced. The parties agree to do such further acts and to execute and deliver such additional agreements and instruments from time to time as may be reasonably necessary or desirable in order to assure and confirm unto such requesting party the rights, powers and remedies conferred in the Agreement. This Agreement, including any exhibits attached hereto, contains the entire agreement and understanding of the parties with respect to the subject matter hereof, and supersedes all prior agreements, negotiations, representations and proposals, written and oral, relating thereto.

All Contributors must sign below. Contributors must check one box except that NIH grantees should check both Contributor-owned work and the NIH grantee box. If your Contribution was written during the course of employment, your employer must also sign where indicated.

Please send your original completed and signed forms by fax or email a scanned copy to the Journal production editor. For production editor contact details please visit the Journal’s online author guidelines. Do not send in hard copies of these forms.

[X] Contributor-owned work

Type or print name and title

Jin-Shei Lai, PhD, OTR

Digitally signed by Jin-Shei Lai, PhD. OTR
Date: 2023.04.15
11:35:56-05'00'

Co-Contributor’s signature

Date

Type or print name and title
[_____] Company/Institution-owned Work (made-for-hire in the Course of employment)

Company or Institution (Employer-for-Hire) ___________ Date ___________

Authorized signature of Employer ___________ Date ___________

Contributor’s signature ___________ Date ___________

Type or print name and title

ATTACH ADDITIONAL SIGNATURE PAGES AS NECESSARY

[_____] U.S. Government work

Note to U.S. Government Employees
A contribution prepared by a U.S. federal government employee as part of the employee's official duties, or which is an official U.S. Government publication, is called a "U.S. Government work", and is in the public domain in the United States. In such case, Paragraph A.1 will not apply but the Contributor must type his/her name (in the Contributor's signature line) above. Contributor acknowledges that the Contribution will be published in the United States and other countries. If the Contribution was not prepared as part of the employee's duties or is not an official U.S. Government publication, it is not a U.S. Government work.

[_____] U.K. Government work (Crown Copyright)

Note to U.K. Government Employees
The rights in a contribution prepared by an employee of a UK government department, agency or other Crown body as part of his/her official duties, or which is an official government publication, belong to the Crown. Contributors must ensure they comply with departmental regulations and submit the appropriate authorisation to publish. If your status as a government employee legally prevents you from signing this Agreement, please contact the Journal production editor.

[_____] Other
Including Other Government work or Non-Governmental Organisation work

Note to Non-U.S., Non-U.K. Government Employees or Non-Governmental Organisation Employees
If your status as a government or non-governmental organisation employee legally prevents you from signing this Agreement, please contact the Journal production editor.
Exhibit A

Financial Disclosure

The Contributor has received financial and material support for this research and work regardless of date from the following sources:

Name: ____________________________
Address: __________________________
Type of support: ____________________

This material will be printed with the published article.

In the past year from the date of submission, the Contributor has also received the following support unrelated to this research (e.g., grants, advisory boards, employment, consultancies, contracts, honoraria, royalties, expert testimony, partnerships, or stock ownership in medically-related fields):

Name: National Institutes of Health
Address: 9000 Rockville Pike, Bethesda, Maryland 20892
Type of support: Research grants (U01, R61, U24, U19, and P30)

This material will be posted on the journal website and may be printed at the Editors’ discretion.

ATTACH ADDITIONAL INFORMATION AS NECESSARY
COPYRIGHT TRANSFER

AGREEMENT Date: 4-15-21

Contributor name: Cindy Nowinski

Contributor address: 625 N. Michigan, Suite 2700, Chicago, IL

Manuscript number: MDS-21-0030

Re: Manuscript entitled: Longitudinal change in Neuro-Qol measures over 3 years in early Parkinson’s disease

for publication in: Movement Disorders (the “Journal”)

Published by Wiley on behalf of The International Parkinson and Movement Disorder Society (the “Owner”)

Dear Contributor(s):

Thank you for submitting your Contribution for publication. In order to expedite the editing and publishing process and enable the Owner to disseminate your Contribution to the fullest extent, we need to have this Copyright Transfer Agreement executed. If the Contribution is not accepted for publication, or if the Contribution is subsequently rejected, this Agreement shall be null and void. Publication cannot proceed without a signed copy of this Agreement.

A. COPYRIGHT

The Contributor assigns to the Owner, during the full term of copyright and any extensions or renewals, all copyright in and to the Contribution, and all rights therein, including but not limited to the right to reproduce, publish, republish, transmit, sell, transfer, distribute, and otherwise use the Contribution in whole or in part in electronic and print editions of the Journal and in derivative works throughout the world, in all languages and in all media of expression now known or later developed, and to license or permit others to do so.

B. RETAINED RIGHTS

Notwithstanding the above, the Contributor or, if applicable, the Contributor’s employer, retains all proprietary rights other than copyright, such as patent rights, in any process, procedure or article of manufacture described in the Contribution. This reservation of rights does not affect or limit the rights assigned to Owner in Section A.

C. PERMITTED USES BY CONTRIBUTOR

1. License. The Owner grants to Contributor a non-exclusive, non-transferable and limited license to reproduce and distribute copies of the print or electronic “preprints” of the unpublished Contribution, in the original form submitted to the Journal prior to the peer review process, solely to colleagues within the Contributor’s nonprofit organization or educational institution. The Contributor shall make no more than 100 printed copies of the preprints in any calendar year. Such preprints may be posted as electronic files on the Contributor’s own personal website, on the Contributor’s internal intranet at Contributor’s nonprofit organization or educational institution, or on a secure external website at the Contributor’s nonprofit organization or educational institution, provided that access is limited to employees and/or students at Contributor’s non-profit organization or educational institution. Contributor shall not charge a fee for any
preprints, and Contributor’s use under this Section C shall not be for any commercial purpose, or for any systematic external distribution (e.g., posting on a listserv, public website, database connected to a public access server, or automated delivery system). The license grant in this Section does not apply to for-profit corporations, and any proposed use outside of the scope of this Section C must be pre-approved in writing by the Owner. The rights granted to Contributor under this Section C do not include reproduction, distribution or any other use of rating scales, videos or other audiovisual materials associated with the Contribution.

2. Required Citation. Prior to publication, the Contributor must provide full credit and acknowledgement of the Journal in all preprints in the following format: This is a preprint of an article accepted for publication in [Journal Title], Copyright © [year] The International Parkinson and Movement Disorder Society. After publication, the Contributor must provide a citation to the Journal in all preprints in the following format: This is a preprint of an article that was published in [Journal title]: (Title of Article, Contributor, Journal Title and Volume/ Issue, Copyright © [year] The International Parkinson and Movement Disorder Society). An electronic link must be provided to the Journal’s website, located at http://www.interscience.wiley.com. The Contributor agrees not to update the preprint or replace it with the published version of the Contribution.

3. Accepted Version. Re-use of the accepted and peer-reviewed (but not the final typeset published) version of the Contribution (the “Accepted Version”) is not permitted under this Agreement. There are separate arrangements with certain funding agencies governing reuse of the Accepted Version. Additional terms apply if the Contributor receives or received funding from these agencies. The details of those relationships, and other offerings allowing open web use, are set forth at the following website: http://www.wiley.com/go/funderstatement.

4. Additional Terms for Certain Funders. Certain funders, including the NIH, members of the Research Councils UK (RCUK) and Wellcome Trust require deposit of the Accepted Version in a public repository after an embargo period. Details of funding arrangements are set out at the following website: http://www.wiley.com/go/funderstatement. Additional terms may be applicable. Please contact the production editor for the journal at MDSprod@wiley.com if you have additional funding requirements.

If any Contributor receiving funds from applicable sources does not choose the Owner’s OnlineOpen option, the Contributor will be allowed to self-archive by depositing the Accepted Version in a public repository after the following applicable embargo period has expired, subject to further conditions imposed by the RCUK:

a. 12 months from first publication online of the final published version of the Contribution for research funded by members of the Research Councils UK (RCUK) other than The Economic and Social Research Council (ESRC) and the Arts and Humanities Research Council (AHRC); or

b. 24 months from first publication online of the final published version of the Contribution for research funded by ESRC or AHRC.

5. Additional Terms for Certain Institutions. Wiley has arrangements with certain educational institutions to permit the deposit of the Accepted Version in the institutional repository after an embargo period. Details of such arrangements are set out at the following website: http://olabout.wiley.com/WileyCDA/Section/id-406074.html. Additional terms may be applicable.

If any Contributor affiliated with these applicable educational institutions does not choose the Owner’s OnlineOpen option, the Contributor will be allowed to self-archive by depositing the Accepted Version in the educational institution’s repository after the following applicable embargo period has expired. See the following website for details: http://olabout.wiley.com/WileyCDA/Section/id-817011.html.
D. CONTRIBUTIONS OWNED BY EMPLOYER

If the Contribution was written by the Contributor in the course of the Contributor’s employment (as a “work-made-for-hire” in the course of employment), the Contribution is owned by the company/institution which must execute this Agreement (in addition to the Contributor’s signature). In such case, the company/institution hereby assigns to the Owner, during the full term of copyright, all copyright in and to the Contribution for the full term of copyright throughout the world as specified in Section A above.

E. GOVERNMENT CONTRACTS

In the case of a Contribution prepared under U.S. Government contract or grant, the U.S. Government may reproduce, without charge, all or portions of the Contribution and may authorize others to do so, for official U.S. Government purposes only, if the U.S. Government contract or grant so requires. (U.S. Government, U.K. Government, and other government employees: see notes at end.)

F. CONTRIBUTOR’S REPRESENTATIONS

The Contributor represents that the Contribution is the Contributor’s original work, all individuals identified as Contributors actually contributed to the Contribution, and all individuals who contributed are included. The Contribution is submitted only to this Journal and has not been published before. (If excerpts from copyrighted works owned by third parties are included, the Contributor will obtain written permission from the copyright owners for all uses as set forth in the Journal’s Instructions for Contributors, and show credit to the sources in the Contribution.) The Contributor also warrants that the Contribution contains no libelous or unlawful statements, does not infringe upon the rights (including without limitation the copyright, patent or trademark rights) or the privacy of others, or contain material or instructions that might cause harm or injury. Upon request, Contributor will provide the data or will cooperating fully in obtaining and providing the data on which the Contribution is based for examination by the editors or their assignees.

G. FINANCIAL DISCLOSURES

The Contributor certifies that his/her financial and material support for this research and work, regardless of date, is clearly identified on Exhibit A to this Agreement. The Contributor has also identified on Exhibit A, all other support unrelated to this research, covering the past year from the date of submission (e.g., grants, advisory boards, employment, consultancies, contracts, honoraria, royalties, expert testimony, partnerships, or stock ownership in medically-related fields).

H. VIDEO AND PHOTOGRAPHY CONSENT

In the event that the Contribution includes, discloses or incorporates any content (including, without limitation, any video clip or photograph) which identifies any individual patient(s) (“patient identifiable content”), the Contributor obtained from such patient(s) written consent to such inclusion, disclosure or incorporation and that this consent fully complies with all legal requirements, including without limitation, all of the requirements of the laws of the jurisdiction(s) to which the patient(s) and the patient(s)’ physician are subject, including the United States Health Insurance Portability and Accountability Act of 1996 (“HIPAA”) if applicable. The Contributor hereby certifies that, if the patient consent form is in a language other than English, such consent form meets all of the requirements set forth in the Instructions to Authors. In addition, the Contributor hereby confirms that he/she obtained from patient(s) written consent to use the patient identifiable content in both print and online (i.e., internet/web-based) publication formats. The Contributor further certifies that the person executing any such patient consent form, to the best of his/her knowledge, had legal capacity under applicable law to execute the form on behalf of the patient.
I. ACKNOWLEDGEMENTS

The Contributor should obtain written permission from all individuals named in the acknowledgement since readers may infer their endorsement of data and conclusions. The Contributor certifies that all individuals named in the acknowledgement section have provided written permission to be named.

J. MISCELLANEOUS

This Agreement may be amended or modified only in a writing executed by both parties. The waiver or failure of any party to exercise any rights under this Agreement shall not be deemed a waiver or other limitation of any other right or any future right. This Agreement shall inure to the benefit of, and shall be binding upon, the parties, their respective successors and permitted assigns. This Agreement may be executed in two (2) or more counterparts, each of which shall be an original and all of which taken together shall constitute one and the same agreement. Executed copies of this Agreement may be delivered by facsimile transmission, pdf/email or other comparable electronic means. If for any reason any provision of this Agreement shall be deemed by a court of competent jurisdiction to be legally invalid or unenforceable, the validity, legality and enforceability of the remainder of this Agreement shall not be affected and such provision shall be deemed modified to the minimum extent necessary to make such provision consistent with applicable law and, in its modified form, such provision shall then be enforceable and enforced. The parties agree to do such further acts and to execute and deliver such additional agreements and instruments from time to time as either may at any time reasonably request in order to assure and confirm unto such requesting party the rights, powers and remedies conferred in the Agreement. This Agreement, including any exhibits attached hereto, contains the entire agreement and understanding of the parties with respect to the subject matter hereof, and supersedes all prior agreements, negotiations, representations and proposals, written and oral, relating thereto.

All Contributors must sign below. Contributors must check one box except that NIH grantees should check both Contributor-owned work and the NIH grantee box. If your Contribution was written during the course of employment, your employer must also sign where indicated.

Please send your original completed and signed forms by fax or email a scanned copy to the Journal production editor. For production editor contact details please visit the Journal’s online author guidelines. Do not send in hard copies of these forms.

[___X___] Contributor-owned work

Contributor’s signature

Cindy Nowinski, MD, PhD

Date

Type or print name and title

Co-Contributor’s signature

Date

Type or print name and title
[_____] Company/Institution-owned Work (made-for-hire in the Course of employment)  
Company or Institution (Employer-for-Hire)  
Date

Authorized signature of Employer  
Date

Contributor’s signature  
Date

Type or print name and title

ATTACH ADDITIONAL SIGNATURE PAGES AS NECESSARY

[_____] U.S. Government work
Note to U.S. Government Employees
A contribution prepared by a U.S. federal government employee as part of the employee's official duties, or which is an official U.S. Government publication, is called a "U.S. Government work", and is in the public domain in the United States. In such case, Paragraph A.1 will not apply but the Contributor must type his/her name (in the Contributor's signature line) above. Contributor acknowledges that the Contribution will be published in the United States and other countries. If the Contribution was not prepared as part of the employee's duties or is not an official U.S. Government publication, it is not a U.S. Government work.

[_____] U.K. Government work (Crown Copyright)
Note to U.K. Government Employees
The rights in a contribution prepared by an employee of a UK government department, agency or other Crown body as part of his/her official duties, or which is an official government publication, belong to the Crown. Contributors must ensure they comply with departmental regulations and submit the appropriate authorisation to publish. If your status as a government employee legally prevents you from signing this Agreement, please contact the Journal production editor.

[_____] Other
Including Other Government work or Non-Governmental Organisation work
Note to Non-U.S., Non-U.K. Government Employees or Non-Governmental Organisation Employees
If your status as a government or non-governmental organisation employee legally prevents you from signing this Agreement, please contact the Journal production editor.
Exhibit A

Financial Disclosure

The Contributor has received financial and material support for this research and work regardless of date from the following sources:

Name: ________________________
Address: _______________________
Type of support: ________________________

This material will be printed with the published article.

In the past year from the date of submission, the Contributor has also received the following support unrelated to this research (e.g., grants, advisory boards, employment, consultancies, contracts, honoraria, royalties, expert testimony, partnerships, or stock ownership in medically-related fields):

Name: Cindy Nowinski
Address: 625 N. Michigan, Suite 2700, Chicago, IL
Type of support: NIH and FDA grant funding

This material will be posted on the journal website and may be printed at the Editors’ discretion.

ATTACH ADDITIONAL INFORMATION AS NECESSARY
COPYRIGHT TRANSFER AGREEMENT

Date: __________________________

Contributor name: Christopher Taroli MD

Contributor address: 601 Elmwood Ave, Box MIND Rochester, NY 14642

Manuscript number: MDS-21-0030

Re: Manuscript entitled: Longitudinal change in Neuro-Qol measures over 3 years in early Parkinson's disease

for publication in: Movement Disorders (the “Journal”)

Published by Wiley on behalf of The International Parkinson and Movement Disorder Society (the “Owner”)

Dear Contributor(s):

Thank you for submitting your Contribution for publication. In order to expedite the editing and publishing process and enable the Owner to disseminate your Contribution to the fullest extent, we need to have this Copyright Transfer Agreement executed. If the Contribution is not accepted for publication, or if the Contribution is subsequently rejected, this Agreement shall be null and void. Publication cannot proceed without a signed copy of this Agreement.

A. COPYRIGHT

The Contributor assigns to the Owner, during the full term of copyright and any extensions or renewals, all copyright in and to the Contribution, and all rights therein, including but not limited to the right to reproduce, publish, republish, transmit, sell, transfer, distribute, and otherwise use the Contribution in whole or in part in electronic and print editions of the Journal and in derivative works throughout the world, in all languages and in all media of expression now known or later developed, and to license or permit others to do so.

B. RETAINED RIGHTS

Notwithstanding the above, the Contributor or, if applicable, the Contributor’s employer, retains all proprietary rights other than copyright, such as patent rights, in any process, procedure or article of manufacture described in the Contribution. This reservation of rights does not affect or limit the rights assigned to Owner in Section A.

C. PERMITTED USES BY CONTRIBUTOR

1. License. The Owner grants to Contributor a non-exclusive, non-transferable and limited license to reproduce and distribute copies of the print or electronic “preprints” of the unpublished Contribution, in the original form submitted to the Journal prior to the peer review process, solely to colleagues within the Contributor’s nonprofit organization or educational institution. The Contributor shall make no more than 100 printed copies of the preprints in any calendar year. Such preprints may be posted as electronic files on the Contributor’s own personal website, on the Contributor’s internal intranet at Contributor’s nonprofit organization or educational institution, or on a secure external website at the Contributor’s nonprofit organization or educational institution, provided that access is limited to employees and/or students at Contributor’s non-profit organization or educational institution. Contributor shall not charge a fee for any
preprints, and Contributor’s use under this Section C shall not be for any commercial purpose, or for any systematic external distribution (e.g., posting on a listserve, public website, database connected to a public access server, or automated delivery system). The license grant in this Section does not apply to for-profit corporations, and any proposed use outside of the scope of this Section C must be pre-approved in writing by the Owner. The rights granted to Contributor under this Section C do not include reproduction, distribution or any other use of rating scales, videos or other audiovisual materials associated with the Contribution.

2. Required Citation. Prior to publication, the Contributor must provide full credit and acknowledgement of the Journal in all preprints in the following format: This is a preprint of an article accepted for publication in [Journal Title], Copyright © [year] The International Parkinson and Movement Disorder Society. After publication, the Contributor must provide a citation to the Journal in all preprints in the following format: This is a preprint of an article that was published in [Journal title]: (Title of Article, Contributor, Journal Title and Volume/ Issue, Copyright © [year] The International Parkinson and Movement Disorder Society). An electronic link must be provided to the Journal’s website, located at http://www.interscience.wiley.com. The Contributor agrees not to update the preprint or replace it with the published version of the Contribution.

3. Accepted Version. Re-use of the accepted and peer-reviewed (but not the final typeset published) version of the Contribution (the “Accepted Version”) is not permitted under this Agreement. There are separate arrangements with certain funding agencies governing reuse of the Accepted Version. Additional terms apply if the Contributor receives or received funding from these agencies. The details of those relationships, and other offerings allowing open web use, are set forth at the following website: http://www.wiley.com/go/funderstatement.

4. Additional Terms for Certain Funders. Certain funders, including the NIH, members of the Research Councils UK (RCUK) and Wellcome Trust require deposit of the Accepted Version in a public repository after an embargo period. Details of funding arrangements are set out at the following website: http://www.wiley.com/go/funderstatement. Additional terms may be applicable. Please contact the production editor for the journal at MDSprod@wiley.com if you have additional funding requirements.

If any Contributor receiving funds from applicable sources does not choose the Owner’s OnlineOpen option, the Contributor will be allowed to self-archive by depositing the Accepted Version in a public repository after the following applicable embargo period has expired, subject to further conditions imposed by the RCUK:

   a. 12 months from first publication online of the final published version of the Contribution for research funded by members of the Research Councils UK (RCUK) other than The Economic and Social Research Council (ESRC) and the Arts and Humanities Research Council (AHRC); or
   b. 24 months from first publication online of the final published version of the Contribution for research funded by ESRC or AHRC.

5. Additional Terms for Certain Institutions. Wiley has arrangements with certain educational institutions to permit the deposit of the Accepted Version in the institutional repository after an embargo period. Details of such arrangements are set out at the following website: http://olabout.wiley.com/WileyCDA/Section/id-406074.html. Additional terms may be applicable.

If any Contributor affiliated with these applicable educational institutions does not choose the Owner’s OnlineOpen option, the Contributor will be allowed to self-archive by depositing the Accepted Version in the educational institution’s repository after the following applicable embargo period has expired. See the following website for details: http://olabout.wiley.com/WileyCDA/Section/id-817011.html.
D. CONTRIBUTIONS OWNED BY EMPLOYER

If the Contribution was written by the Contributor in the course of the Contributor’s employment (as a “work-made-for-hire” in the course of employment), the Contribution is owned by the company/institution which must execute this Agreement (in addition to the Contributor’s signature). In such case, the company/institution hereby assigns to the Owner, during the full term of copyright, all copyright in and to the Contribution for the full term of copyright throughout the world as specified in Section A above.

E. GOVERNMENT CONTRACTS

In the case of a Contribution prepared under U.S. Government contract or grant, the U.S. Government may reproduce, without charge, all or portions of the Contribution and may authorize others to do so, for official U.S. Government purposes only, if the U.S. Government contract or grant so requires. (U.S. Government, U.K. Government, and other government employees: see notes at end.)

F. CONTRIBUTOR’S REPRESENTATIONS

The Contributor represents that the Contribution is the Contributor’s original work, all individuals identified as Contributors actually contributed to the Contribution, and all individuals who contributed are included. The Contribution is submitted only to this Journal and has not been published before. (If excerpts from copyrighted works owned by third parties are included, the Contributor will obtain written permission from the copyright owners for all uses as set forth in the Journal’s Instructions for Contributors, and show credit to the sources in the Contribution.) The Contributor also warrants that the Contribution contains no libelous or unlawful statements, does not infringe upon the rights (including without limitation the copyright, patent or trademark rights) or the privacy of others, or contain material or instructions that might cause harm or injury. Upon request, Contributor will provide the data or will cooperating fully in obtaining and providing the data on which the Contribution is based for examination by the editors or their assignees.

G. FINANCIAL DISCLOSURES

The Contributor certifies that his/her financial and material support for this research and work, regardless of date, is clearly identified on Exhibit A to this Agreement. The Contributor has also identified on Exhibit A, all other support unrelated to this research, covering the past year from the date of submission (e.g., grants, advisory boards, employment, consultancies, contracts, honoraria, royalties, expert testimony, partnerships, or stock ownership in medically-related fields).

H. VIDEO AND PHOTOGRAPHY CONSENT

In the event that the Contribution includes, discloses or incorporates any content (including, without limitation, any video clip or photograph) which identifies any individual patient(s) (“patient identifiable content”), the Contributor obtained from such patient(s) written consent to such inclusion, disclosure or incorporation and that this consent fully complies with all legal requirements, including without limitation, all of the requirements of the laws of the jurisdiction(s) to which the patient(s) and the patient(s)’ physician are subject, including the United States Health Insurance Portability and Accountability Act of 1996 (“HIPAA”) if applicable. The Contributor hereby certifies that, if the patient consent form is in a language other than English, such consent form meets all of the requirements set forth in the Instructions to Authors. In addition, the Contributor hereby confirms that he/she obtained from patient(s) written consent to use the patient identifiable content in both print and online (i.e., internet/web-based) publication formats. The Contributor further certifies that the person executing any such patient consent form, to the best of his/her knowledge, had legal capacity under applicable law to execute the form on behalf of the patient.
I. ACKNOWLEDGEMENTS

The Contributor should obtain written permission from all individuals named in the acknowledgement since readers may infer their endorsement of data and conclusions. The Contributor certifies that all individuals named in the acknowledgement section have provided written permission to be named.

J. MISCELLANEOUS

This Agreement may be amended or modified only in a writing executed by both parties. The waiver or failure of any party to exercise any rights under this Agreement shall not be deemed a waiver or other limitation of any other right or any future right. This Agreement shall inure to the benefit of, and shall be binding upon, the parties, their respective successors and permitted assigns. This Agreement may be executed in two (2) or more counterparts, each of which shall be an original and all of which taken together shall constitute one and the same agreement. Executed copies of this Agreement may be delivered by facsimile transmission, pdf/email or other comparable electronic means. If for any reason any provision of this Agreement shall be deemed by a court of competent jurisdiction to be legally invalid or unenforceable, the validity, legality and enforceability of the remainder of this Agreement shall not be affected and such provision shall be deemed modified to the minimum extent necessary to make such provision consistent with applicable law and, in its modified form, such provision shall then be enforceable and enforced. The parties agree to do such further acts and to execute and deliver such additional agreements and instruments from time to time as either may at any time reasonably request in order to assure and confirm unto such requesting party the rights, powers and remedies conferred in the Agreement. This Agreement, including any exhibits attached hereto, contains the entire agreement and understanding of the parties with respect to the subject matter hereof, and supersedes all prior agreements, negotiations, representations and proposals, written and oral, relating thereto.

All Contributors must sign below. Contributors must check one box except that NIH grantees should check both Contributor-owned work and the NIH grantee box. If your Contribution was written during the course of employment, your employer must also sign where indicated.

Please send your original completed and signed forms by fax or email a scanned copy to the Journal production editor. For production editor contact details please visit the Journal’s online author guidelines. Do not send in hard copies of these forms.

[ ] Contributor-owned work

[ ] NIH grantee work

Contributor’s signature     Date

Type or print name and title

Co-Contributor’s signature     Date

Type or print name and title
ATTACH ADDITIONAL SIGNATURE PAGES AS NECESSARY

[_____] U.S. Government work

Note to U.S. Government Employees

A contribution prepared by a U.S. federal government employee as part of the employee's official duties, or which is an official U.S. Government publication, is called a "U.S. Government work", and is in the public domain in the United States. In such case, Paragraph A.I will not apply but the Contributor must type his/her name (in the Contributor's signature line) above. Contributor acknowledges that the Contribution will be published in the United States and other countries. If the Contribution was not prepared as part of the employee's duties or is not an official U.S. Government publication, it is not a U.S. Government work.

[_____] U.K. Government work (Crown Copyright)

Note to U.K. Government Employees

The rights in a contribution prepared by an employee of a UK government department, agency or other Crown body as part of his/her official duties, or which is an official government publication, belong to the Crown. Contributors must ensure they comply with departmental regulations and submit the appropriate authorisation to publish. If your status as a government employee legally prevents you from signing this Agreement, please contact the Journal production editor.

[_____] Other

Including Other Government work or Non-Governmental Organisation work

Note to Non-U.S., Non-U.K. Government Employees or Non-Governmental Organisation Employees

If your status as a government or non-governmental organisation employee legally prevents you from signing this Agreement, please contact the Journal production editor.
Exhibit A

Financial Disclosure

The Contributor has received financial and material support for this research and work regardless of date from the following sources:

Name: NIH-NINDS
Address: ______________________
Type of support: Research Support

This material will be printed with the published article.

In the past year from the date of submission, the Contributor has also received the following support unrelated to this research (e.g., grants, advisory boards, employment, consultancies, contracts, honoraria, royalties, expert testimony, partnerships, or stock ownership in medically-related fields):

Name: Biosensics
Address: Newton, MA
Type of support: Research Support

This material will be posted on the journal website and may be printed at the Editors’ discretion.

ATTACH ADDITIONAL INFORMATION AS NECESSARY
COPYRIGHT TRANSFER AGREEMENT

Date: 4/12/2021

Contributor name: Kelly Mills, MD, MHS

Contributor address: 600 N. Wolfe St., Meyer 6-181D, Baltimore, MD 21287

Manuscript number: MDS-21-0030

Re: Manuscript entitled: Longitudinal change in Neuro-Qol measures over 3 years in early Parkinson’s disease

for publication in: Movement Disorders (the “Journal”)

Published by Wiley on behalf of The International Parkinson and Movement Disorder Society (the “Owner”)

Dear Contributor(s):

Thank you for submitting your Contribution for publication. In order to expedite the editing and publishing process and enable the Owner to disseminate your Contribution to the fullest extent, we need to have this Copyright Transfer Agreement executed. If the Contribution is not accepted for publication, or if the Contribution is subsequently rejected, this Agreement shall be null and void. Publication cannot proceed without a signed copy of this Agreement.

A. COPYRIGHT

The Contributor assigns to the Owner, during the full term of copyright and any extensions or renewals, all copyright in and to the Contribution, and all rights therein, including but not limited to the right to reproduce, publish, republish, transmit, sell, transfer, distribute, and otherwise use the Contribution in whole or in part in electronic and print editions of the Journal and in derivative works throughout the world, in all languages and in all media of expression now known or later developed, and to license or permit others to do so.

B. RETAINED RIGHTS

Notwithstanding the above, the Contributor or, if applicable, the Contributor’s employer, retains all proprietary rights other than copyright, such as patent rights, in any process, procedure or article of manufacture described in the Contribution. This reservation of rights does not affect or limit the rights assigned to Owner in Section A.

C. PERMITTED USES BY CONTRIBUTOR

1. License. The Owner grants to Contributor a non-exclusive, non-transferable and limited license to reproduce and distribute copies of the print or electronic “preprints” of the unpublished Contribution, in the original form submitted to the Journal prior to the peer review process, solely to colleagues within the Contributor’s nonprofit organization or educational institution. The Contributor shall make no more than 100 printed copies of the preprints in any calendar year. Such preprints may be posted as electronic files on the Contributor’s own personal website, on the Contributor’s internal intranet at Contributor’s nonprofit organization or educational institution, or on a secure external website at the Contributor’s nonprofit organization or educational institution, provided that access is limited to employees and/or students at Contributor’s non-profit organization or educational institution. Contributor shall not charge a fee for any
preprints, and Contributor’s use under this Section C shall not be for any commercial purpose, or for any systematic external distribution (e.g., posting on a listserv, public website, database connected to a public access server, or automated delivery system). The license grant in this Section does not apply to for-profit corporations, and any proposed use outside of the scope of this Section C must be pre-approved in writing by the Owner. The rights granted to Contributor under this Section C do not include reproduction, distribution or any other use of rating scales, videos or other audiovisual materials associated with the Contribution.

2. Required Citation. Prior to publication, the Contributor must provide full credit and acknowledgement of the Journal in all preprints in the following format: This is a preprint of an article accepted for publication in [Journal Title], Copyright © [year] The International Parkinson and Movement Disorder Society. After publication, the Contributor must provide a citation to the Journal in all preprints in the following format: This is a preprint of an article that was published in [Journal title]: (Title of Article, Contributor, Journal Title and Volume/Issue, Copyright © [year] The International Parkinson and Movement Disorder Society). An electronic link must be provided to the Journal’s website, located at http://www.interscience.wiley.com. The Contributor agrees not to update the preprint or replace it with the published version of the Contribution.

3. Accepted Version. Re-use of the accepted and peer-reviewed (but not the final typeset published) version of the Contribution (the “Accepted Version”) is not permitted under this Agreement. There are separate arrangements with certain funding agencies governing reuse of the Accepted Version. Additional terms apply if the Contributor receives or received funding from these agencies. The details of those relationships, and other offerings allowing open web use, are set forth at the following website: http://www.wiley.com/go/funderstatement.

4. Additional Terms for Certain Funders. Certain funders, including the NIH, members of the Research Councils UK (RCUK) and Wellcome Trust require deposit of the Accepted Version in a public repository after an embargo period. Details of funding arrangements are set out at the following website: http://www.wiley.com/go/funderstatement. Additional terms may be applicable. Please contact the production editor for the journal at MDSprod@wiley.com if you have additional funding requirements.

If any Contributor receiving funds from applicable sources does not choose the Owner’s OnlineOpen option, the Contributor will be allowed to self-archive by depositing the Accepted Version in a public repository after the following applicable embargo period has expired, subject to further conditions imposed by the RCUK:

a. 12 months from first publication online of the final published version of the Contribution for research funded by members of the Research Councils UK (RCUK) other than The Economic and Social Research Council (ESRC) and the Arts and Humanities Research Council (AHRC); or

b. 24 months from first publication online of the final published version of the Contribution for research funded by ESRC or AHRC.

5. Additional Terms for Certain Institutions. Wiley has arrangements with certain educational institutions to permit the deposit of the Accepted Version in the institutional repository after an embargo period. Details of such arrangements are set out at the following website: http://olabout.wiley.com/WileyCDA/Section/id-406074.html. Additional terms may be applicable.

If any Contributor affiliated with these applicable educational institutions does not choose the Owner’s OnlineOpen option, the Contributor will be allowed to self-archive by depositing the Accepted Version in the educational institution’s repository after the following applicable embargo period has expired. See the following website for details: http://olabout.wiley.com/WileyCDA/Section/id-817011.html.
D. CONTRIBUTIONS OWNED BY EMPLOYER

If the Contribution was written by the Contributor in the course of the Contributor’s employment (as a “work-made-for-hire” in the course of employment), the Contribution is owned by the company/institution which must execute this Agreement (in addition to the Contributor’s signature). In such case, the company/institution hereby assigns to the Owner, during the full term of copyright, all copyright in and to the Contribution for the full term of copyright throughout the world as specified in Section A above.

E. GOVERNMENT CONTRACTS

In the case of a Contribution prepared under U.S. Government contract or grant, the U.S. Government may reproduce, without charge, all or portions of the Contribution and may authorize others to do so, for official U.S. Government purposes only, if the U.S. Government contract or grant so requires. (U.S. Government, U.K. Government, and other government employees: see notes at end.)

F. CONTRIBUTOR’S REPRESENTATIONS

The Contributor represents that the Contribution is the Contributor’s original work, all individuals identified as Contributors actually contributed to the Contribution, and all individuals who contributed are included. The Contribution is submitted only to this Journal and has not been published before. (If excerpts from copyrighted works owned by third parties are included, the Contributor will obtain written permission from the copyright owners for all uses as set forth in the Journal’s Instructions for Contributors, and show credit to the sources in the Contribution.) The Contributor also warrants that the Contribution contains no libelous or unlawful statements, does not infringe upon the rights (including without limitation the copyright, patent or trademark rights) or the privacy of others, or contain material or instructions that might cause harm or injury. Upon request, Contributor will provide the data or will cooperating fully in obtaining and providing the data on which the Contribution is based for examination by the editors or their assignees.

G. FINANCIAL DISCLOSURES

The Contributor certifies that his/her financial and material support for this research and work, regardless of date, is clearly identified on Exhibit A to this Agreement. The Contributor has also identified on Exhibit A, all other support unrelated to this research, covering the past year from the date of submission (e.g., grants, advisory boards, employment, consultancies, contracts, honoraria, royalties, expert testimony, partnerships, or stock ownership in medically-related fields).

H. VIDEO AND PHOTOGRAPHY CONSENT

In the event that the Contribution includes, discloses or incorporates any content (including, without limitation, any video clip or photograph) which identifies any individual patient(s) (“patient identifiable content”), the Contributor obtained from such patient(s) written consent to such inclusion, disclosure or incorporation and that this consent fully complies with all legal requirements, including without limitation, all of the requirements of the laws of the jurisdiction(s) to which the patient(s) and the patient(s)’ physician are subject, including the United States Health Insurance Portability and Accountability Act of 1996 (“HIPAA”) if applicable. The Contributor hereby certifies that, if the patient consent form is in a language other than English, such consent form meets all of the requirements set forth in the Instructions to Authors. In addition, the Contributor hereby confirms that he/she obtained from patient(s) written consent to use the patient identifiable content in both print and online (i.e., internet/web-based) publication formats. The Contributor further certifies that the person executing any such patient consent form, to the best of his/her knowledge, had legal capacity under applicable law to execute the form on behalf of the patient.
I. ACKNOWLEDGEMENTS

The Contributor should obtain written permission from all individuals named in the acknowledgement since readers may infer their endorsement of data and conclusions. The Contributor certifies that all individuals named in the acknowledgement section have provided written permission to be named.

J. MISCELLANEOUS

This Agreement may be amended or modified only in a writing executed by both parties. The waiver or failure of any party to exercise any rights under this Agreement shall not be deemed a waiver or other limitation of any other right or any future right. This Agreement shall inure to the benefit of, and shall be binding upon, the parties, their respective successors and permitted assigns. This Agreement may be executed in two (2) or more counterparts, each of which shall be an original and all of which taken together shall constitute one and the same agreement. Executed copies of this Agreement may be delivered by facsimile transmission, pdf/email or other comparable electronic means. If for any reason any provision of this Agreement shall be deemed by a court of competent jurisdiction to be legally invalid or unenforceable, the validity, legality and enforceability of the remainder of this Agreement shall not be affected and such provision shall be deemed modified to the minimum extent necessary to make such provision consistent with applicable law and, in its modified form, such provision shall then be enforceable and enforced. The parties agree to do such further acts and to execute and deliver such additional agreements and instruments from time to time as either may at any time reasonably request in order to assure and confirm unto such requesting party the rights, powers and remedies conferred in the Agreement. This Agreement, including any exhibits attached hereto, contains the entire agreement and understanding of the parties with respect to the subject matter hereof, and supersedes all prior agreements, negotiations, representations and proposals, written and oral, relating thereto.

All Contributors must sign below. Contributors must check one box except that NIH grantees should check both Contributor-owned work and the NIH grantee box. If your Contribution was written during the course of employment, your employer must also sign where indicated.

Please send your original completed and signed forms by fax or email a scanned copy to the Journal production editor. For production editor contact details please visit the Journal’s online author guidelines. Do not send in hard copies of these forms.

[ X ] Contributor-owned work

Contributor’s signature ____________________________ Date ____________________________

Type or print name and title

[Signature]

4/12/2021

Co-Contributor’s signature ____________________________ Date ____________________________

Kelly Mills, MD, MHS

Type or print name and title
[________] Company/Institution-owned Work (made-for-hire in the Course of employment) 

Company or Institution (Employer-for-Hire)  Date

__________________________
Authorized signature of Employer  Date

__________________________
Contributor's signature  Date

__________________________
Type or print name and title

ATTACH ADDITIONAL SIGNATURE PAGES AS NECESSARY

[________] U.S. Government work

Note to U.S. Government Employees
A contribution prepared by a U.S. federal government employee as part of the employee's official duties, or which is an official U.S. Government publication, is called a "U.S. Government work", and is in the public domain in the United States. In such case, Paragraph A.1 will not apply but the Contributor must type his/her name (in the Contributor's signature line) above. Contributor acknowledges that the Contribution will be published in the United States and other countries. If the Contribution was not prepared as part of the employee's duties or is not an official U.S. Government publication, it is not a U.S. Government work.

[________] U.K. Government work (Crown Copyright)

Note to U.K. Government Employees
The rights in a contribution prepared by an employee of a UK government department, agency or other Crown body as part of his/her official duties, or which is an official government publication, belong to the Crown. Contributors must ensure they comply with departmental regulations and submit the appropriate authorisation to publish. If your status as a government employee legally prevents you from signing this Agreement, please contact the Journal production editor.

[________] Other
Including Other Government work or Non-Governmental Organisation work

Note to Non-U.S., Non-U.K. Government Employees or Non-Governmental Organisation Employees
If your status as a government or non-governmental organisation employee legally prevents you from signing this Agreement, please contact the Journal production editor.
Exhibit A

Financial Disclosure

The Contributor has received financial and material support for this research and work regardless of date from the following sources:

Name: ____________________________
Address: __________________________
Type of support: ____________________

This material will be printed with the published article.

In the past year from the date of submission, the Contributor has also received the following support unrelated to this research (e.g., grants, advisory boards, employment, consultancies, contracts, honoraria, royalties, expert testimony, partnerships, or stock ownership in medically-related fields):

Name: NIH / NINDS
Address: Ninds Campus Ste 49, Bethesda, MD 20892
Type of support: Research Award

This material will be posted on the journal website and may be printed at the Editors’ discretion.

ATTACH ADDITIONAL INFORMATION AS NECESSARY

Global Kinetics Corporation
Level 9, 31 Queen St, Melbourne
Victoria 3000 Australia
Research Support
COPYRIGHT TRANSFER AGREEMENT

Date: 4/12/2021

Contributor name: Sotirios A. Parashos, MD

Contributor address: 6701 Country Club Drive, Golden Valley, MN, 55427, USA

Manuscript number: MDS-21-0030

Re: Manuscript entitled: Longitudinal change in Neuro-Qol measures over 3 years in early Parkinson's disease

for publication in: Movement Disorders (the “Journal”)

Published by Wiley on behalf of The International Parkinson and Movement Disorder Society (the “Owner”)

Dear Contributor(s):

Thank you for submitting your Contribution for publication. In order to expedite the editing and publishing process and enable the Owner to disseminate your Contribution to the fullest extent, we need to have this Copyright Transfer Agreement executed. If the Contribution is not accepted for publication, or if the Contribution is subsequently rejected, this Agreement shall be null and void. Publication cannot proceed without a signed copy of this Agreement.

A. COPYRIGHT

The Contributor assigns to the Owner, during the full term of copyright and any extensions or renewals, all copyright in and to the Contribution, and all rights therein, including but not limited to the right to reproduce, publish, republish, transmit, sell, transfer, distribute, and otherwise use the Contribution in whole or in part in electronic and print editions of the Journal and in derivative works throughout the world, in all languages and in all media of expression now known or later developed, and to license or permit others to do so.

B. RETAINED RIGHTS

Notwithstanding the above, the Contributor or, if applicable, the Contributor’s employer, retains all proprietary rights other than copyright, such as patent rights, in any process, procedure or article of manufacture described in the Contribution. This reservation of rights does not affect or limit the rights assigned to Owner in Section A.

C. PERMITTED USES BY CONTRIBUTOR

1. License. The Owner grants to Contributor a non-exclusive, non-transferable and limited license to reproduce and distribute copies of the print or electronic “preprints” of the unpublished Contribution, in the original form submitted to the Journal prior to the peer review process, solely to colleagues within the Contributor’s nonprofit organization or educational institution. The Contributor shall make no more than 100 printed copies of the preprints in any calendar year. Such preprints may be posted as electronic files on the Contributor’s own personal website, on the Contributor’s internal intranet at Contributor’s nonprofit organization or educational institution, or on a secure external website at the Contributor’s nonprofit organization or educational institution, provided that access is limited to employees and/or students at Contributor’s non-profit organization or educational institution. Contributor shall not charge a fee for any
preprints, and Contributor’s use under this Section C shall not be for any commercial purpose, or for any systematic external distribution (e.g., posting on a listserv, public website, database connected to a public access server, or automated delivery system). The license grant in this Section does not apply to for-profit corporations, and any proposed use outside of the scope of this Section C must be pre-approved in writing by the Owner. The rights granted to Contributor under this Section C do not include reproduction, distribution or any other use of rating scales, videos or other audiovisual materials associated with the Contribution.

2. Required Citation. Prior to publication, the Contributor must provide full credit and acknowledgement of the Journal in all preprints in the following format: This is a preprint of an article accepted for publication in [Journal Title], Copyright © [year] The International Parkinson and Movement Disorder Society. After publication, the Contributor must provide a citation to the Journal in all preprints in the following format: This is a preprint of an article that was published in [Journal title]: (Title of Article, Contributor, Journal Title and Volume/Issue, Copyright © [year] The International Parkinson and Movement Disorder Society). An electronic link must be provided to the Journal’s website, located at http://www.interscience.wiley.com. The Contributor agrees not to update the preprint or replace it with the published version of the Contribution.

3. Accepted Version. Re-use of the accepted and peer-reviewed (but not the final typeset published) version of the Contribution (the “Accepted Version”) is not permitted under this Agreement. There are separate arrangements with certain funding agencies governing reuse of the Accepted Version. Additional terms apply if the Contributor receives or received funding from these agencies. The details of those relationships, and other offerings allowing open web use, are set forth at the following website: http://www.wiley.com/go/funderstatement.

4. Additional Terms for Certain Funders. Certain funders, including the NIH, members of the Research Councils UK (RCUK) and Wellcome Trust require deposit of the Accepted Version in a public repository after an embargo period. Details of funding arrangements are set out at the following website: http://www.wiley.com/go/funderstatement. Additional terms may be applicable. Please contact the production editor for the journal at MDSprod@wiley.com if you have additional funding requirements.

If any Contributor receiving funds from applicable sources does not choose the Owner’s OnlineOpen option, the Contributor will be allowed to self-archive by depositing the Accepted Version in a public repository after the following applicable embargo period has expired, subject to further conditions imposed by the RCUK:

a. 12 months from first publication online of the final published version of the Contribution for research funded by members of the Research Councils UK (RCUK) other than The Economic and Social Research Council (ESRC) and the Arts and Humanities Research Council (AHRC); or

b. 24 months from first publication online of the final published version of the Contribution for research funded by ESRC or AHRC.

5. Additional Terms for Certain Institutions. Wiley has arrangements with certain educational institutions to permit the deposit of the Accepted Version in the institutional repository after an embargo period. Details of such arrangements are set out at the following website: http://olabout.wiley.com/WileyCDA/Section/id-406074.html. Additional terms may be applicable.

If any Contributor affiliated with these applicable educational institutions does not choose the Owner’s OnlineOpen option, the Contributor will be allowed to self-archive by depositing the Accepted Version in the educational institution’s repository after the following applicable embargo period has expired. See the following website for details: http://olabout.wiley.com/WileyCDA/Section/id-817011.html.
D. CONTRIBUTIONS OWNED BY EMPLOYER

If the Contribution was written by the Contributor in the course of the Contributor’s employment (as a “work-made-for-hire” in the course of employment), the Contribution is owned by the company/institution which must execute this Agreement (in addition to the Contributor’s signature). In such case, the company/institution hereby assigns to the Owner, during the full term of copyright, all copyright in and to the Contribution for the full term of copyright throughout the world as specified in Section A above.

E. GOVERNMENT CONTRACTS

In the case of a Contribution prepared under U.S. Government contract or grant, the U.S. Government may reproduce, without charge, all or portions of the Contribution and may authorize others to do so, for official U.S. Government purposes only, if the U.S. Government contract or grant so requires. (U.S. Government, U.K. Government, and other government employees: see notes at end.)

F. CONTRIBUTOR’S REPRESENTATIONS

The Contributor represents that the Contribution is the Contributor’s original work, all individuals identified as Contributors actually contributed to the Contribution, and all individuals who contributed are included. The Contribution is submitted only to this Journal and has not been published before. (If excerpts from copyrighted works owned by third parties are included, the Contributor will obtain written permission from the copyright owners for all uses as set forth in the Journal’s Instructions for Contributors, and show credit to the sources in the Contribution.) The Contributor also warrants that the Contribution contains no libelous or unlawful statements, does not infringe upon the rights (including without limitation the copyright, patent or trademark rights) or the privacy of others, or contain material or instructions that might cause harm or injury. Upon request, Contributor will provide the data or will cooperating fully in obtaining and providing the data on which the Contribution is based for examination by the editors or their assignees.

G. FINANCIAL DISCLOSURES

The Contributor certifies that his/her financial and material support for this research and work, regardless of date, is clearly identified on Exhibit A to this Agreement. The Contributor has also identified on Exhibit A, all other support unrelated to this research, covering the past year from the date of submission (e.g., grants, advisory boards, employment, consultancies, contracts, honoraria, royalties, expert testimony, partnerships, or stock ownership in medically-related fields).

H. VIDEO AND PHOTOGRAPHY CONSENT

In the event that the Contribution includes, discloses or incorporates any content (including, without limitation, any video clip or photograph) which identifies any individual patient(s) (“patient identifiable content”), the Contributor obtained from such patient(s) written consent to such inclusion, disclosure or incorporation and that this consent fully complies with all legal requirements, including without limitation, all of the requirements of the laws of the jurisdiction(s) to which the patient(s) and the patient(s)’ physician are subject, including the United States Health Insurance Portability and Accountability Act of 1996 (“HIPAA”) if applicable. The Contributor hereby certifies that, if the patient consent form is in a language other than English, such consent form meets all of the requirements set forth in the Instructions to Authors. In addition, the Contributor hereby confirms that he/she obtained from patient(s) written consent to use the patient identifiable content in both print and online (i.e., internet/web-based) publication formats. The Contributor further certifies that the person executing any such patient consent form, to the best of his/her knowledge, had legal capacity under applicable law to execute the form on behalf of the patient.
I. ACKNOWLEDGEMENTS

The Contributor should obtain written permission from all individuals named in the acknowledgement since readers may infer their endorsement of data and conclusions. The Contributor certifies that all individuals named in the acknowledgement section have provided written permission to be named.

J. MISCELLANEOUS

This Agreement may be amended or modified only in a writing executed by both parties. The waiver or failure of any party to exercise any rights under this Agreement shall not be deemed a waiver or other limitation of any other right or any future right. This Agreement shall inure to the benefit of, and shall be binding upon, the parties, their respective successors and permitted assigns. This Agreement may be executed in two (2) or more counterparts, each of which shall be an original and all of which taken together shall constitute one and the same agreement. Executed copies of this Agreement may be delivered by facsimile transmission, pdf/email or other comparable electronic means. If for any reason any provision of this Agreement shall be deemed by a court of competent jurisdiction to be legally invalid or unenforceable, the validity, legality and enforceability of the remainder of this Agreement shall not be affected and such provision shall be deemed modified to the minimum extent necessary to make such provision consistent with applicable law and, in its modified form, such provision shall then be enforceable and enforced. The parties agree to do such further acts and to execute and deliver such additional agreements and instruments from time to time as either may at any time reasonably request in order to assure and confirm unto such requesting party the rights, powers and remedies conferred in the Agreement. This Agreement, including any exhibits attached hereto, contains the entire agreement and understanding of the parties with respect to the subject matter hereof, and supersedes all prior agreements, negotiations, representations and proposals, written and oral, relating thereto.

All Contributors must sign below. Contributors must check one box except that NIH grantees should check both Contributor-owned work and the NIH grantee box. If your Contribution was written during the course of employment, your employer must also sign where indicated.

Please send your original completed and signed forms by fax or email a scanned copy to the Journal production editor. For production editor contact details please visit the Journal’s online author guidelines. Do not send in hard copies of these forms.

[ ] Contributor-owned work

<table>
<thead>
<tr>
<th>Contributor’s signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Type or print name and title

<table>
<thead>
<tr>
<th>Co-Contributor’s signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sotirios A. Parashos, MD</td>
<td>4/12/2021</td>
</tr>
</tbody>
</table>

Type or print name and title
[_____] Company/Institution-owned Work (made-for-hire in the Course of employment)

Company or Institution (Employer-for-Hire) Date

Authorized signature of Employer Date

Contributor’s signature Date

Type or print name and title

ATTACH ADDITIONAL SIGNATURE PAGES AS NECESSARY

[_____] U.S. Government work

Note to U.S. Government Employees
A contribution prepared by a U.S. federal government employee as part of the employee’s official duties, or which is an official U.S. Government publication, is called a “U.S. Government work”, and is in the public domain in the United States. In such case, Paragraph A.1 will not apply but the Contributor must type his/her name (in the Contributor’s signature line) above. Contributor acknowledges that the Contribution will be published in the United States and other countries. If the Contribution was not prepared as part of the employee’s duties or is not an official U.S. Government publication, it is not a U.S. Government work.

[_____] U.K. Government work (Crown Copyright)

Note to U.K. Government Employees
The rights in a contribution prepared by an employee of a UK government department, agency or other Crown body as part of his/her official duties, or which is an official government publication, belong to the Crown. Contributors must ensure they comply with departmental regulations and submit the appropriate authorisation to publish. If your status as a government employee legally prevents you from signing this Agreement, please contact the Journal production editor.

[_____] Other

Including Other Government work or Non-Governmental Organisation work

Note to Non-U.S., Non-U.K. Government Employees or Non-Governmental Organisation Employees
If your status as a government or non-governmental organisation employee legally prevents you from signing this Agreement, please contact the Journal production editor.
Exhibit A

Financial Disclosure

The Contributor has received financial and material support for this research and work regardless of date from the following sources:

Name: __________________________
Address: __________________________
Type of support: __________________________

This material will be printed with the published article.

In the past year from the date of submission, the Contributor has also received the following support unrelated to this research (e.g., grants, advisory boards, employment, consultancies, contracts, honoraria, royalties, expert testimony, partnerships, or stock ownership in medically-related fields):

Name: __________________________
Address: __________________________
Type of support: __________________________

This material will be posted on the journal website and may be printed at the Editors’ discretion.

ATTACH ADDITIONAL INFORMATION AS NECESSARY

Financial disclosure related to research covered in this article:
None.
Full financial disclosure for the previous 12 months:
Research support: The Parkinson’s Foundation and the Park Nicollet Foundation
Royalties: Oxford University Press
Shareholder: Abbott
Consultancies: Abbvie.
COPYRIGHT TRANSFER AGREEMENT

Date: 04/12/2021

Contributor name: Tanya Simuni

Contributor address: 710 N Lakeshore Drive

Manuscript number: MDS-21-0030

Re: Manuscript entitled: Longitudinal change in Neuro-Qol measures over 3 years in early Parkinson's disease (the “Contribution”) for publication in: Movement Disorders (the “Journal”)

Published by Wiley on behalf of The International Parkinson and Movement Disorder Society (the “Owner”)

Dear Contributor(s):

Thank you for submitting your Contribution for publication. In order to expedite the editing and publishing process and enable the Owner to disseminate your Contribution to the fullest extent, we need to have this Copyright Transfer Agreement executed. If the Contribution is not accepted for publication, or if the Contribution is subsequently rejected, this Agreement shall be null and void. **Publication cannot proceed without a signed copy of this Agreement.**

---

**A. COPYRIGHT**

The Contributor assigns to the Owner, during the full term of copyright and any extensions or renewals, all copyright in and to the Contribution, and all rights therein, including but not limited to the right to reproduce, publish, republish, transmit, sell, transfer, distribute, and otherwise use the Contribution in whole or in part in electronic and print editions of the Journal and in derivative works throughout the world, in all languages and in all media of expression now known or later developed, and to license or permit others to do so.

**B. RETAINED RIGHTS**

Notwithstanding the above, the Contributor or, if applicable, the Contributor’s employer, retains all proprietary rights other than copyright, such as patent rights, in any process, procedure or article of manufacture described in the Contribution. This reservation of rights does not affect or limit the rights assigned to Owner in Section A.

**C. PERMITTED USES BY CONTRIBUTOR**

1. **License.** The Owner grants to Contributor a non-exclusive, non-transferable and limited license to reproduce and distribute copies of the print or electronic “preprints” of the unpublished Contribution, in the original form submitted to the Journal prior to the peer review process, solely to colleagues within the Contributor’s nonprofit organization or educational institution. The Contributor shall make no more than 100 printed copies of the preprints in any calendar year. Such preprints may be posted as electronic files on the Contributor’s own personal website, on the Contributor’s internal intranet at Contributor’s nonprofit organization or educational institution, or on a secure external website at the Contributor’s nonprofit organization or educational institution, provided that access is limited to employees and/or students at Contributor’s non-profit organization or educational institution. Contributor shall not charge a fee for any
preprints, and Contributor’s use under this Section C shall not be for any commercial purpose, or for any systematic external distribution (e.g., posting on a listserve, public website, database connected to a public access server, or automated delivery system). The license grant in this Section does not apply to for-profit corporations, and any proposed use outside of the scope of this Section C must be pre-approved in writing by the Owner. The rights granted to Contributor under this Section C do not include reproduction, distribution or any other use of rating scales, videos or other audiovisual materials associated with the Contribution.

2. Required Citation. Prior to publication, the Contributor must provide full credit and acknowledgement of the Journal in all preprints in the following format: This is a preprint of an article accepted for publication in [Journal Title], Copyright © [year] The International Parkinson and Movement Disorder Society. After publication, the Contributor must provide a citation to the Journal in all preprints in the following format: This is a preprint of an article that was published in [Journal title]: (Title of Article, Contributor, Journal Title and Volume/Issue, Copyright © [year] The International Parkinson and Movement Disorder Society). An electronic link must be provided to the Journal’s website, located at http://www.interscience.Wiley.com. The Contributor agrees not to update the preprint or replace it with the published version of the Contribution.

3. Accepted Version. Re-use of the accepted and peer-reviewed (but not the final typeset published) version of the Contribution (the “Accepted Version”) is not permitted under this Agreement. There are separate arrangements with certain funding agencies governing reuse of the Accepted Version. Additional terms apply if the Contributor receives or received funding from these agencies. The details of those relationships, and other offerings allowing open web use, are set forth at the following website: http://www.wiley.com/go/funderstatement.

4. Additional Terms for Certain Funders. Certain funders, including the NIH, members of the Research Councils UK (RCUK) and Wellcome Trust require deposit of the Accepted Version in a public repository after an embargo period. Details of funding arrangements are set out at the following website: http://www.wiley.com/go/funderstatement. Additional terms may be applicable. Please contact the production editor for the journal at MDSprod@wiley.com if you have additional funding requirements.

If any Contributor receiving funds from applicable sources does not choose the Owner’s OnlineOpen option, the Contributor will be allowed to self-archive by depositing the Accepted Version in a public repository after the following applicable embargo period has expired, subject to further conditions imposed by the RCUK:

a. 12 months from first publication online of the final published version of the Contribution for research funded by members of the Research Councils UK (RCUK) other than The Economic and Social Research Council (ESRC) and the Arts and Humanities Research Council (AHRC); or

b. 24 months from first publication online of the final published version of the Contribution for research funded by ESRC or AHRC.

5. Additional Terms for Certain Institutions. Wiley has arrangements with certain educational institutions to permit the deposit of the Accepted Version in the institutional repository after an embargo period. Details of such arrangements are set out at the following website: http://olabout.wiley.com/WileyCDA/Section/id-406074.html. Additional terms may be applicable.

If any Contributor affiliated with these applicable educational institutions does not choose the Owner’s OnlineOpen option, the Contributor will be allowed to self-archive by depositing the Accepted Version in the educational institution’s repository after the following applicable embargo period has expired. See the following website for details: http://olabout.wiley.com/WileyCDA/Section/id-817011.html.
D. CONTRIBUTIONS OWNED BY EMPLOYER

If the Contribution was written by the Contributor in the course of the Contributor’s employment (as a “work-made-for-hire” in the course of employment), the Contribution is owned by the company/institution which must execute this Agreement (in addition to the Contributor’s signature). In such case, the company/institution hereby assigns to the Owner, during the full term of copyright, all copyright in and to the Contribution for the full term of copyright throughout the world as specified in Section A above.

E. GOVERNMENT CONTRACTS

In the case of a Contribution prepared under U.S. Government contract or grant, the U.S. Government may reproduce, without charge, all or portions of the Contribution and may authorize others to do so, for official U.S. Government purposes only, if the U.S. Government contract or grant so requires. (U.S. Government, U.K. Government, and other government employees: see notes at end.)

F. CONTRIBUTOR’S REPRESENTATIONS

The Contributor represents that the Contribution is the Contributor’s original work, all individuals identified as Contributors actually contributed to the Contribution, and all individuals who contributed are included. The Contribution is submitted only to this Journal and has not been published before. (If excerpts from copyrighted works owned by third parties are included, the Contributor will obtain written permission from the copyright owners for all uses as set forth in the Journal’s Instructions for Contributors, and show credit to the sources in the Contribution.) The Contributor also warrants that the Contribution contains no libelous or unlawful statements, does not infringe upon the rights (including without limitation the copyright, patent or trademark rights) or the privacy of others, or contain material or instructions that might cause harm or injury. Upon request, Contributor will provide the data or will cooperating fully in obtaining and providing the data on which the Contribution is based for examination by the editors or their assignees.

G. FINANCIAL DISCLOSURES

The Contributor certifies that his/her financial and material support for this research and work, regardless of date, is clearly identified on Exhibit A to this Agreement. The Contributor has also identified on Exhibit A, all other support unrelated to this research, covering the past year from the date of submission (e.g., grants, advisory boards, employment, consultancies, contracts, honoraria, royalties, expert testimony, partnerships, or stock ownership in medically-related fields).

H. VIDEO AND PHOTOGRAPHY CONSENT

In the event that the Contribution includes, discloses or incorporates any content (including, without limitation, any video clip or photograph) which identifies any individual patient(s) (“patient identifiable content”), the Contributor obtained from such patient(s) written consent to such inclusion, disclosure or incorporation and that this consent fully complies with all legal requirements, including without limitation, all of the requirements of the laws of the jurisdiction(s) to which the patient(s) and the patient(s)’ physician are subject, including the United States Health Insurance Portability and Accountability Act of 1996 (“HIPAA”) if applicable. The Contributor hereby certifies that, if the patient consent form is in a language other than English, such consent form meets all of the requirements set forth in the Instructions to Authors. In addition, the Contributor hereby confirms that he/she obtained from patient(s) written consent to use the patient identifiable content in both print and online (i.e., internet/web-based) publication formats. The Contributor further certifies that the person executing any such patient consent form, to the best of his/her knowledge, had legal capacity under applicable law to execute the form on behalf of the patient.
I. ACKNOWLEDGEMENTS

The Contributor should obtain written permission from all individuals named in the acknowledgement since readers may infer their endorsement of data and conclusions. The Contributor certifies that all individuals named in the acknowledgement section have provided written permission to be named.

J. MISCELLANEOUS

This Agreement may be amended or modified only in a writing executed by both parties. The waiver or failure of any party to exercise any rights under this Agreement shall not be deemed a waiver or other limitation of any other right or any future right. This Agreement shall inure to the benefit of, and shall be binding upon, the parties, their respective successors and permitted assigns. This Agreement may be executed in two (2) or more counterparts, each of which shall be an original and all of which taken together shall constitute one and the same agreement. Executed copies of this Agreement may be delivered by facsimile transmission, pdf/email or other comparable electronic means. If for any reason any provision of this Agreement shall be deemed by a court of competent jurisdiction to be legally invalid or unenforceable, the validity, legality and enforceability of the remainder of this Agreement shall not be affected and such provision shall be deemed modified to the minimum extent necessary to make such provision consistent with applicable law and, in its modified form, such provision shall then be enforceable and enforced. The parties agree to do such further acts and to execute and deliver such additional agreements and instruments from time to time as either may at any time reasonably request in order to assure and confirm unto such requesting party the rights, powers and remedies conferred in the Agreement. This Agreement, including any exhibits attached hereto, contains the entire agreement and understanding of the parties with respect to the subject matter hereof, and supersedes all prior agreements, negotiations, representations and proposals, written and oral, relating thereto.

All Contributors must sign below. Contributors must check one box except that NIH grantees should check both Contributor-owned work and the NIH grantee box. If your Contribution was written during the course of employment, your employer must also sign where indicated.

Please send your original completed and signed forms by fax or email a scanned copy to the Journal production editor. For production editor contact details please visit the Journal’s online author guidelines. Do not send in hard copies of these forms.

[_____] Contributor-owned work

<table>
<thead>
<tr>
<th>Contributor’s signature</th>
<th>Date</th>
</tr>
</thead>
</table>

Type or print name and title

________________________

Co-Contributor’s signature

<table>
<thead>
<tr>
<th>Date</th>
</tr>
</thead>
</table>

4/12/21

Tanya Simuni

Type or print name and title
[_____] Company/Institution-owned Work (made-for-hire in the Course of employment)

Company or Institution (Employer-for-Hire) Date

____________________________________
Authorized signature of Employer Date

Contributor’s signature Date

Type or print name and title

ATTACH ADDITIONAL SIGNATURE PAGES AS NECESSARY

[_____] U.S. Government work
Note to U.S. Government Employees
A contribution prepared by a U.S. federal government employee as part of the employee's official duties, or which is an official U.S. Government publication, is called a "U.S. Government work", and is in the public domain in the United States. In such case, Paragraph A.1 will not apply but the Contributor must type his/her name (in the Contributor's signature line) above. Contributor acknowledges that the Contribution will be published in the United States and other countries. If the Contribution was not prepared as part of the employee's duties or is not an official U.S. Government publication, it is not a U.S. Government work.

[_____] U.K. Government work (Crown Copyright)
Note to U.K. Government Employees
The rights in a contribution prepared by an employee of a UK government department, agency or other Crown body as part of his/her official duties, or which is an official government publication, belong to the Crown. Contributors must ensure they comply with departmental regulations and submit the appropriate authorisation to publish. If your status as a government employee legally prevents you from signing this Agreement, please contact the Journal production editor.

[_____] Other
Including Other Government work or Non-Governmental Organisation work
Note to Non-U.S., Non-U.K. Government Employees or Non-Governmental Organisation Employees
If your status as a government or non-governmental organisation employee legally prevents you from signing this Agreement, please contact the Journal production editor.
Exhibit A

Financial Disclosure

The Contributor has received financial and material support for this research and work regardless of date from the following sources:

Name: Acadia, Denali, General Electric (GE), Neuroderm, Sanofi, Sinopia, Sunovion, Roche, Takeda, MJFF and Voyager.

Address: ________________

Type of support: Consultant

This material will be printed with the published article.

In the past year from the date of submission, the Contributor has also received the following support unrelated to this research (e.g., grants, advisory boards, employment, consultancies, contracts, honoraria, royalties, expert testimony, partnerships, or stock ownership in medically-related fields):

Name: Acadia, Denali, General Electric (GE), Sunovian, Roche, Neuroderm and Sanofi

Address: ________________

Type of support: Advisory board and Scientific Board

This material will be posted on the journal website and may be printed at the Editors’ discretion.

ATTACH ADDITIONAL INFORMATION AS NECESSARY

Dr. Simuni has received research funding from Biogen, Roche, Neuroderm, Sanofi, Sun Pharma, Amneal, Prevail, UCB, NINDS, MJFF and Parkinson’s Foundation
COPYRIGHT TRANSFER AGREEMENT

Date: April 19 2021

Contributor name: Connie Marras MD, PhD

Contributor address: 399 Bathurst St. Toronto, ON Canada M5T 2S8

Manuscript number: MDS-21-0030

Re: Manuscript entitled: Longitudinal change in Neuro-Qol measures over 3 years in early Parkinson's disease

Published by Wiley on behalf of The International Parkinson and Movement Disorder Society (the “Owner”)

Dear Contributor(s):

Thank you for submitting your Contribution for publication. In order to expedite the editing and publishing process and enable the Owner to disseminate your Contribution to the fullest extent, we need to have this Copyright Transfer Agreement executed. If the Contribution is not accepted for publication, or if the Contribution is subsequently rejected, this Agreement shall be null and void. \textit{Publication cannot proceed without a signed copy of this Agreement.}

\section{A. COPYRIGHT}

The Contributor assigns to the Owner, during the full term of copyright and any extensions or renewals, all copyright in and to the Contribution, and all rights therein, including but not limited to the right to reproduce, publish, republish, transmit, sell, transfer, distribute, and otherwise use the Contribution in whole or in part in electronic and print editions of the Journal and in derivative works throughout the world, in all languages and in all media of expression now known or later developed, and to license or permit others to do so.

\section{B. RETAINED RIGHTS}

Notwithstanding the above, the Contributor or, if applicable, the Contributor’s employer, retains all proprietary rights other than copyright, such as patent rights, in any process, procedure or article of manufacture described in the Contribution. This reservation of rights does not affect or limit the rights assigned to Owner in Section A.

\section{C. PERMITTED USES BY CONTRIBUTOR}

1. License. The Owner grants to Contributor a non-exclusive, non-transferable and limited license to reproduce and distribute copies of the print or electronic “preprints” of the unpublished Contribution, in the original form submitted to the Journal prior to the peer review process, solely to colleagues within the Contributor’s nonprofit organization or educational institution. The Contributor shall make no more than 100 printed copies of the preprints in any calendar year. Such preprints may be posted as electronic files on the Contributor’s own personal website, on the Contributor’s internal intranet at Contributor’s nonprofit organization or educational institution, or on a secure external website at the Contributor’s nonprofit organization or educational institution, provided that access is limited to employees and/or students at Contributor’s non-profit organization or educational institution. Contributor shall not charge a fee for any
preprints, and Contributor’s use under this Section C shall not be for any commercial purpose, or for any systematic external distribution (e.g., posting on a listserve, public website, database connected to a public access server, or automated delivery system). The license grant in this Section does not apply to for-profit corporations, and any proposed use outside of the scope of this Section C must be pre-approved in writing by the Owner. The rights granted to Contributor under this Section C do not include reproduction, distribution or any other use of rating scales, videos or other audiovisual materials associated with the Contribution.

2. Required Citation. Prior to publication, the Contributor must provide full credit and acknowledgement of the Journal in all preprints in the following format: This is a preprint of an article accepted for publication in [Journal Title], Copyright © [year] The International Parkinson and Movement Disorder Society. After publication, the Contributor must provide a citation to the Journal in all preprints in the following format: This is a preprint of an article that was published in [Journal title]: (Title of Article, Contributor, Journal Title and Volume/Issue, Copyright © [year] The International Parkinson and Movement Disorder Society). An electronic link must be provided to the Journal’s website, located at http://www.interscience.wiley.com. The Contributor agrees not to update the preprint or replace it with the published version of the Contribution.

3. Accepted Version. Re-use of the accepted and peer-reviewed (but not the final typeset published) version of the Contribution (the “Accepted Version”) is not permitted under this Agreement. There are separate arrangements with certain funding agencies governing reuse of the Accepted Version. Additional terms apply if the Contributor receives or received funding from these agencies. The details of those relationships, and other offerings allowing open web use, are set forth at the following website: http://www.wiley.com/go/funderstatement.

4. Additional Terms for Certain Funders. Certain funders, including the NIH, members of the Research Councils UK (RCUK) and Wellcome Trust require deposit of the Accepted Version in a public repository after an embargo period. Details of funding arrangements are set out at the following website: http://www.wiley.com/go/funderstatement. Additional terms may be applicable. Please contact the production editor for the journal at MDSprod@wiley.com if you have additional funding requirements.

If any Contributor receiving funds from applicable sources does not choose the Owner’s OnlineOpen option, the Contributor will be allowed to self-archive by depositing the Accepted Version in a public repository after the following applicable embargo period has expired, subject to further conditions imposed by the RCUK:

   a. 12 months from first publication online of the final published version of the Contribution for research funded by members of the Research Councils UK (RCUK) other than The Economic and Social Research Council (ESRC) and the Arts and Humanities Research Council (AHRC); or

   b. 24 months from first publication online of the final published version of the Contribution for research funded by ESRC or AHRC.

5. Additional Terms for Certain Institutions. Wiley has arrangements with certain educational institutions to permit the deposit of the Accepted Version in the institutional repository after an embargo period. Details of such arrangements are set out at the following website: http://olabout.wiley.com/WileyCDA/Section/id-406074.html. Additional terms may be applicable.

If any Contributor affiliated with these applicable educational institutions does not choose the Owner’s OnlineOpen option, the Contributor will be allowed to self-archive by depositing the Accepted Version in the educational institution’s repository after the following applicable embargo period has expired. See the following website for details: http://olabout.wiley.com/WileyCDA/Section/id-817011.html.
D. CONTRIBUTIONS OWNED BY EMPLOYER

If the Contribution was written by the Contributor in the course of the Contributor’s employment (as a “work-made-for-hire” in the course of employment), the Contribution is owned by the company/institution which must execute this Agreement (in addition to the Contributor’s signature). In such case, the company/institution hereby assigns to the Owner, during the full term of copyright, all copyright in and to the Contribution for the full term of copyright throughout the world as specified in Section A above.

E. GOVERNMENT CONTRACTS

In the case of a Contribution prepared under U.S. Government contract or grant, the U.S. Government may reproduce, without charge, all or portions of the Contribution and may authorize others to do so, for official U.S. Government purposes only, if the U.S. Government contract or grant so requires. (U.S. Government, U.K. Government, and other government employees: see notes at end.)

F. CONTRIBUTOR’S REPRESENTATIONS

The Contributor represents that the Contribution is the Contributor’s original work, all individuals identified as Contributors actually contributed to the Contribution, and all individuals who contributed are included. The Contribution is submitted only to this Journal and has not been published before. (If excerpts from copyrighted works owned by third parties are included, the Contributor will obtain written permission from the copyright owners for all uses as set forth in the Journal’s Instructions for Contributors, and show credit to the sources in the Contribution.) The Contributor also warrants that the Contribution contains no libelous or unlawful statements, does not infringe upon the rights (including without limitation the copyright, patent or trademark rights) or the privacy of others, or contain material or instructions that might cause harm or injury. Upon request, Contributor will provide the data or will cooperating fully in obtaining and providing the data on which the Contribution is based for examination by the editors or their assignees.

G. FINANCIAL DISCLOSURES

The Contributor certifies that his/her financial and material support for this research and work, regardless of date, is clearly identified on Exhibit A to this Agreement. The Contributor has also identified on Exhibit A, all other support unrelated to this research, covering the past year from the date of submission (e.g., grants, advisory boards, employment, consultancies, contracts, honoraria, royalties, expert testimony, partnerships, or stock ownership in medically-related fields).

H. VIDEO AND PHOTOGRAPHY CONSENT

In the event that the Contribution includes, discloses or incorporates any content (including, without limitation, any video clip or photograph) which identifies any individual patient(s) (“patient identifiable content”), the Contributor obtained from such patient(s) written consent to such inclusion, disclosure or incorporation and that this consent fully complies with all legal requirements, including without limitation, all of the requirements of the laws of the jurisdiction(s) to which the patient(s) and the patient(s)’ physician are subject, including the United States Health Insurance Portability and Accountability Act of 1996 (“HIPAA”) if applicable. The Contributor hereby certifies that, if the patient consent form is in a language other than English, such consent form meets all of the requirements set forth in the Instructions to Authors. In addition, the Contributor hereby confirms that he/she obtained from patient(s) written consent to use the patient identifiable content in both print and online (i.e., internet/web-based) publication formats. The Contributor further certifies that the person executing any such patient consent form, to the best of his/her knowledge, had legal capacity under applicable law to execute the form on behalf of the patient.
I. ACKNOWLEDGEMENTS

The Contributor should obtain written permission from all individuals named in the acknowledgement since readers may infer their endorsement of data and conclusions. The Contributor certifies that all individuals named in the acknowledgement section have provided written permission to be named.

J. MISCELLANEOUS

This Agreement may be amended or modified only in a writing executed by both parties. The waiver or failure of any party to exercise any rights under this Agreement shall not be deemed a waiver or other limitation of any other right or any future right. This Agreement shall inure to the benefit of, and shall be binding upon, the parties, their respective successors and permitted assigns. This Agreement may be executed in two (2) or more counterparts, each of which shall be an original and all of which taken together shall constitute one and the same agreement. Executed copies of this Agreement may be delivered by facsimile transmission, pdf/email or other comparable electronic means. If for any reason any provision of this Agreement shall be deemed by a court of competent jurisdiction to be legally invalid or unenforceable, the validity, legality and enforceability of the remainder of this Agreement shall not be affected and such provision shall be deemed modified to the minimum extent necessary to make such provision consistent with applicable law and, in its modified form, such provision shall then be enforceable and enforced. The parties agree to do such further acts and to execute and deliver such additional agreements and instruments from time to time as either may at any time reasonably request in order to assure and confirm unto such requesting party the rights, powers and remedies conferred in the Agreement. This Agreement, including any exhibits attached hereto, contains the entire agreement and understanding of the parties with respect to the subject matter hereof, and supersedes all prior agreements, negotiations, representations and proposals, written and oral, relating thereto.

All Contributors must sign below. Contributors must check one box except that NIH grantees should check both Contributor-owned work and the NIH grantee box. If your Contribution was written during the course of employment, your employer must also sign where indicated.

Please send your original completed and signed forms by fax or email a scanned copy to the Journal production editor. For production editor contact details please visit the Journal’s online author guidelines. Do not send in hard copies of these forms.

[ X ] Contributor-owned work

[ Name ]

April 19 2021

Date

[ Type or print name and title ]

[ Co-Contributor’s signature ]

Date

[ Type or print name and title ]
[ ] Company/Institution-owned Work (made-for-hire in the Course of employment)  

Company or Institution (Employer-for-Hire)  

Date

____________________________  

Authorized signature of Employer  

Date

____________________________  

Contributor’s signature  

Date

____________________________  

Type or print name and title

ATTACH ADDITIONAL SIGNATURE PAGES AS NECESSARY

[ ] U.S. Government work  

Note to U.S. Government Employees  

A contribution prepared by a U.S. federal government employee as part of the employee's official duties, or which is an official U.S. Government publication, is called a "U.S. Government work", and is in the public domain in the United States. In such case, Paragraph A.1 will not apply but the Contributor must type his/her name (in the Contributor's signature line) above. Contributor acknowledges that the Contribution will be published in the United States and other countries. If the Contribution was not prepared as part of the employee's duties or is not an official U.S. Government publication, it is not a U.S. Government work.

[ ] U.K. Government work (Crown Copyright)  

Note to U.K. Government Employees  

The rights in a contribution prepared by an employee of a UK government department, agency or other Crown body as part of his/her official duties, or which is an official government publication, belong to the Crown. Contributors must ensure they comply with departmental regulations and submit the appropriate authorisation to publish. If your status as a government employee legally prevents you from signing this Agreement, please contact the Journal production editor.

[ ] Other  

Including Other Government work or Non-Governmental Organisation work  

Note to Non-U.S., Non-U.K. Government Employees or Non-Governmental Organisation Employees  

If your status as a government or non-governmental organisation employee legally prevents you from signing this Agreement, please contact the Journal production editor.
Exhibit A

Financial Disclosure

The Contributor has received financial and material support for this research and work regardless of date from the following sources:

Name: None
Address: 
Type of support: 

This material will be printed with the published article.

In the past year from the date of submission, the Contributor has also received the following support unrelated to this research (e.g., grants, advisory boards, employment, consultancies, contracts, honoraria, royalties, expert testimony, partnerships, or stock ownership in medically-related fields):

Name: see below
Address: 
Type of support: 

This material will be posted on the journal website and may be printed at the Editors’ discretion.

ATTACH ADDITIONAL INFORMATION AS NECESSARY

Dr. Marras is a consultant for Grey Matter Technologies and receives financial compensation as a steering committee member from the Michael J Fox Foundation and the Parkinson’s Foundation (US) She received research grants from the Michael J Fox Foundation, International Parkinson and Movement Disorders Society and as a site investigator for clinical trials sponsored by Theravance Inc, the Michael J Fox Foundation and Centogene.
Table 1: Correlations of the changes over 3 years between Neuro-QoL item bank scores and comparison measures

<table>
<thead>
<tr>
<th>Measures (Neuro-QoL item bank / Comparison Measure)</th>
<th>Expected correlation direction**</th>
<th>Spearman correlation coefficient</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neuro-QoL Anxiety/ PDQ-39 Emotional Well-Being</td>
<td>positive</td>
<td>0.50</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Neuro-QoL Depression/PDQ-39 Emotional Well-Being</td>
<td>positive</td>
<td>0.53</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Neuro-QoL Lower Extremity Function - Mobility/PDQ-39 Mobility</td>
<td>negative</td>
<td>-0.45</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Neuro-QoL Upper Extremity Function - Fine Motor, ADL/PDQ-39 ADL</td>
<td>negative</td>
<td>-0.53</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Neuro-QoL Stigma/PDQ-39 Stigma</td>
<td>positive</td>
<td>0.41</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Neuro-QoL Executive Function/MDS-UPDRS 1.1*</td>
<td>negative</td>
<td>-0.25</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Neuro-QoL Applied Cognition General Concerns/MDS-UPDRS item 1.1*</td>
<td>negative</td>
<td>-0.19</td>
<td>0.0009</td>
</tr>
<tr>
<td>Neuro-QoL Positive Affect and Well-Being/PDQ-39 Emotional Well-Being</td>
<td>negative</td>
<td>-0.42</td>
<td>&lt;0.0001</td>
</tr>
</tbody>
</table>

*MDS-UPDRS item 1.1=Patient or caregiver-reported cognitive impairment. **For the PDQ-39 higher scores indicate worse health status, whereas for the Neuro-QoL item banks higher scores indicate more of the construct being measured (i.e., better function or worse symptom). For example higher scores on the Neuro-QoL Positive Affect and Well-Being item bank are better whereas for Anxiety higher scores are worse.
Table 2: Mean change and effect size of each Neuro-QoL domain and comparison measure over 3 years

<table>
<thead>
<tr>
<th>Measure</th>
<th>Mean change, baseline to year 3 (SE)</th>
<th>p-value*</th>
<th>Effect size*** for 3-year change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neuro-QoL Anxiety</td>
<td>0.73 (0.37)</td>
<td>0.05</td>
<td>0.11</td>
</tr>
<tr>
<td>Neuro-QoL Depression</td>
<td>0.50 (0.31)</td>
<td>0.10</td>
<td>0.09</td>
</tr>
<tr>
<td>Neuro-QoL Positive Affect and Well-Being</td>
<td>0.34 (0.49)</td>
<td>0.49</td>
<td>0.04</td>
</tr>
<tr>
<td>PDQ-39 Emotional Well-Being</td>
<td>1.67 (0.80)</td>
<td>0.04</td>
<td>0.12</td>
</tr>
<tr>
<td>Neuro-QoL Lower Extremity Function - Mobility</td>
<td>-2.02 (0.33)</td>
<td>&lt;0.0001</td>
<td>-0.35</td>
</tr>
<tr>
<td>PDQ-39 Mobility</td>
<td>3.84 (0.66)</td>
<td>&lt;0.0001</td>
<td>0.34</td>
</tr>
<tr>
<td>Neuro-QoL Upper Extremity Function - Fine Motor</td>
<td>-1.91 (0.43)</td>
<td>&lt;0.0001</td>
<td>-0.25</td>
</tr>
<tr>
<td>PDQ-39 ADL</td>
<td>5.08 (0.80)</td>
<td>&lt;0.0001</td>
<td>0.36</td>
</tr>
<tr>
<td>Neuro-QoL Stigma</td>
<td>0.41 (0.30)</td>
<td>0.17</td>
<td>0.08</td>
</tr>
<tr>
<td>PDQ-39 Stigma</td>
<td>0.15 (0.85)</td>
<td>0.86</td>
<td>0.01</td>
</tr>
<tr>
<td>Neuro-QoL Executive Function</td>
<td>-2.75 (0.41)</td>
<td>&lt;0.0001</td>
<td>-0.38</td>
</tr>
<tr>
<td>Neuro-QoL Applied Cognition General Concerns</td>
<td>-2.57 (0.38)</td>
<td>&lt;0.0001</td>
<td>-0.39</td>
</tr>
<tr>
<td>MDS-UPDRS 1.1**</td>
<td>0.17 (0.04)</td>
<td>&lt;0.0001</td>
<td>0.27</td>
</tr>
</tbody>
</table>

*t-test for change >0,  **Cognitive impairment, ***mean difference/SD change