Dear Editors and Reviewers:

Thank you for your letter and for the reviewers’ comments concerning our manuscript entitled “Behavioral Assessments of Spontaneous Locomotion in a Murine MPTP-induced Parkinson’s Disease Model” (ID: JoVE58653).

Those comments are all valuable and very helpful for revising and improving our paper, as well as the important guiding significance to our researches. We have studied these comments carefully and have made correction which we hope to meet with approval. Revised portion are marked in red in the paper. The main corrections in the paper and the responds to the editor comments are as following:

**Responses to the editorial comments:**

Comment: This sentence cannot be understood. Unclear what is meant by “lesion of spontaneous locomotion”. There are grammatical errors.

Response: We’re sorry for the incorrect writing. We’ve rewritten this sentence in line 40.

1. Comment: I’m not sure what is meant by this phrase. It is grammatically incorrect. Please revise

Response: We’re sorry for the incorrect writing. We’ve changed the word “lesion” into “motor deficit” in line 96

Comment: This sentence needs revision, it is unclear what is being said.

Response: Thank you for your suggestion. We’ve rewritten this sentence in line 96.

Comment: Instead of the previous note, I have made the administration of drugs into steps to ensure that it is filmed. This appeared to be important to show. Please verify that the steps are correct.

Response: Thank you for your suggestion. We have checked the steps from your suggestion and made some small changes to it.

Comment: Please describe how intragastric administration is performed.

Response: Thank you for your suggestion. We have added a description of how intragastric administration is performed in line 130.

1. Comment: Lesion on which anatomical region? This phrasing is incorrect. Why don’t you show a figure showing the MPTP-induced lesion as a supplementary figure? If you do not have this, I am not sure how you can claim that there is a lesion without validation.

Response: We’re sorry for the incorrect writing. The word “lesion” has been replaced by “deficit”, which is shown in the motor function of mice. We tried to reorganize the language to make it clear.

Comment: Lesion on which anatomical region? Substantia nigra? Please provide figures showing the MPTP-induced lesion and its treatment using L-DOPA as a supplementary figure? If you do not have this, I am not sure how you can claim that the lesion is treated without validation. All supplementary figures need figure legends.

Response: We’re sorry for the incorrect writing. The word “lesion” has been replaced by “deficit”, which is shown in the motor function of mice.

Comment: Again, this phrasing is incorrect. Please change this. Also, you do not show that there is a lesion on the substantia nigra.

Response: We’re sorry for the incorrect writing. The word “lesion” has been replaced by “deficit”, which is shown in the motor function of mice.

We tried our best to improve the manuscript and made some changes in the manuscript.  These changes will not influence the content and framework of the paper. And here we did not list the changes but marked in red in revised paper.

We appreciate for Editor’s warm work earnestly and hope that the correction will meet with approval.

Once again, thank you very much for your comments and suggestions，

Best regards，

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