


CORRECTION

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Correction: SNCA genetic lowering reveals differential cognitive function of alpha-synuclein dependent on sex

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Correction: Acta Neuropathol Commun (2022) 10:180
<https://doi.org/10.1186/s40478-022-01480-y>

Following the publication of the original article [1], it was noted that due to a technical error Fig. 1c was incorrect. The images presented in Fig. 1C for the “2 weeks ASO” and “3 weeks ASO” groups are identical. Unfortunately, this was not detected prior to publication. The authors

have reviewed the original images and raw data files for this experiment and they can confirm that the published images for the “2 week ASO” group are not consistent with the original raw files but depict the raw images corresponding to the “3 weeks ASO” group. The correct figure is given hereafter.

The correction does not change the conclusions of the published work.

The original article can be found online at <https://doi.org/10.1186/s40478-022-01480-y>.

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The incorrect Fig. 1(C) reads:

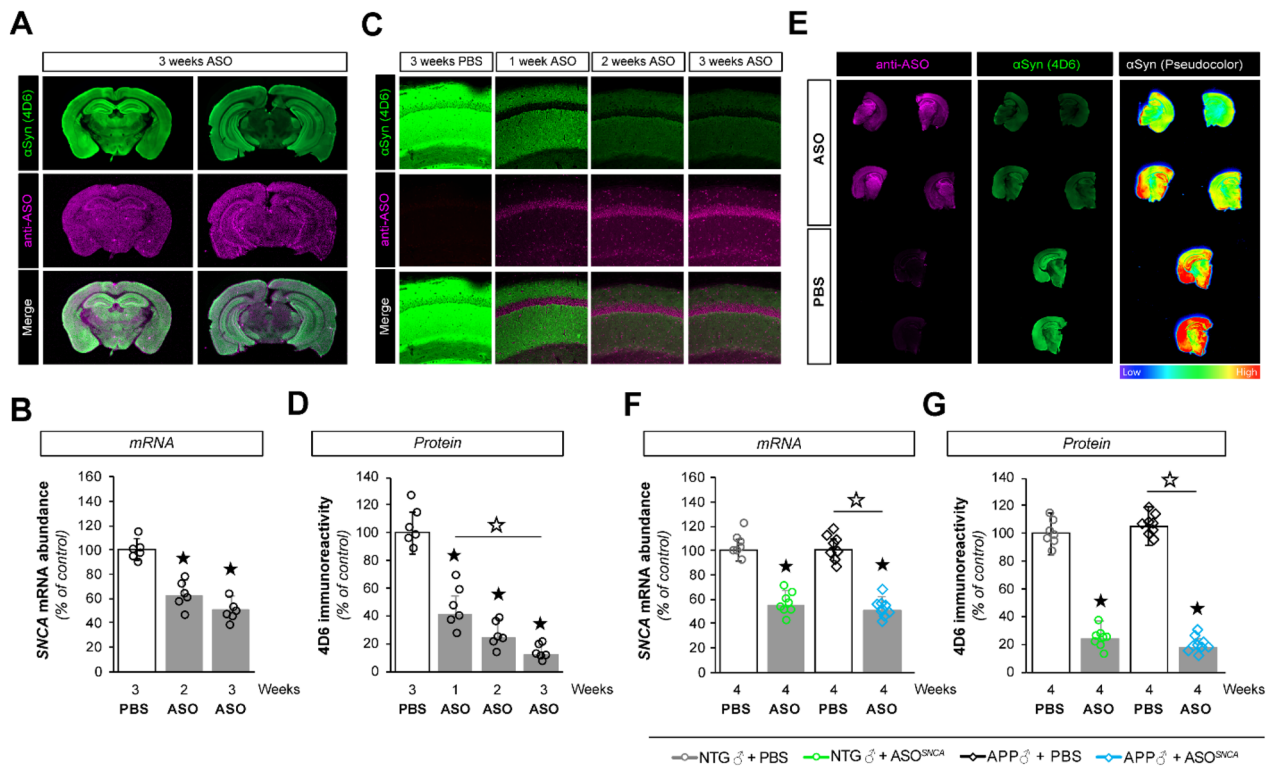


Fig. 1 ASO1 disperses throughout the brain and lowers SNCA gene expression. **A** Infra-red imaging documenting the widespread distribution of ASOs 3 weeks after injection using anti-ASO (pink) and anti- α Syn (4D6, green) antibodies. **B** Reduction in SNCA mRNA at 2 and 3 weeks post-injection as determined by RT-qPCR. **C** Confocal imaging illustrating the presence of ASO1 (pink) and a corresponding decrease in α Syn (green) in mouse hippocampi. **D** Quantification of hippocampal 4D6 immunoreactivity in ASO1 or PBS treated mice. **E** Infra-red imaging detected α Syn (green) and ASO (pink) in coronal brain sections from PBS and ASO treated mice. The relative α Syn signal was lower in ASO-injected animals than in PBS-injected animals (pseudocolor). **F, G** Measurements of SNCA mRNA abundance by RT-qPCR (**F**) and α Syn protein amounts by immunofluorescence (**G**) in transgenic (APP) and non-transgenic (NTG) animals treated with PBS or ASO. Histogram bars represent mean \pm SEM. $\star P < 0.05$ compared to NTG+PBS, $\star P < 0.05$ compared to APP+PBS

The correct Fig. 1(C) should read:

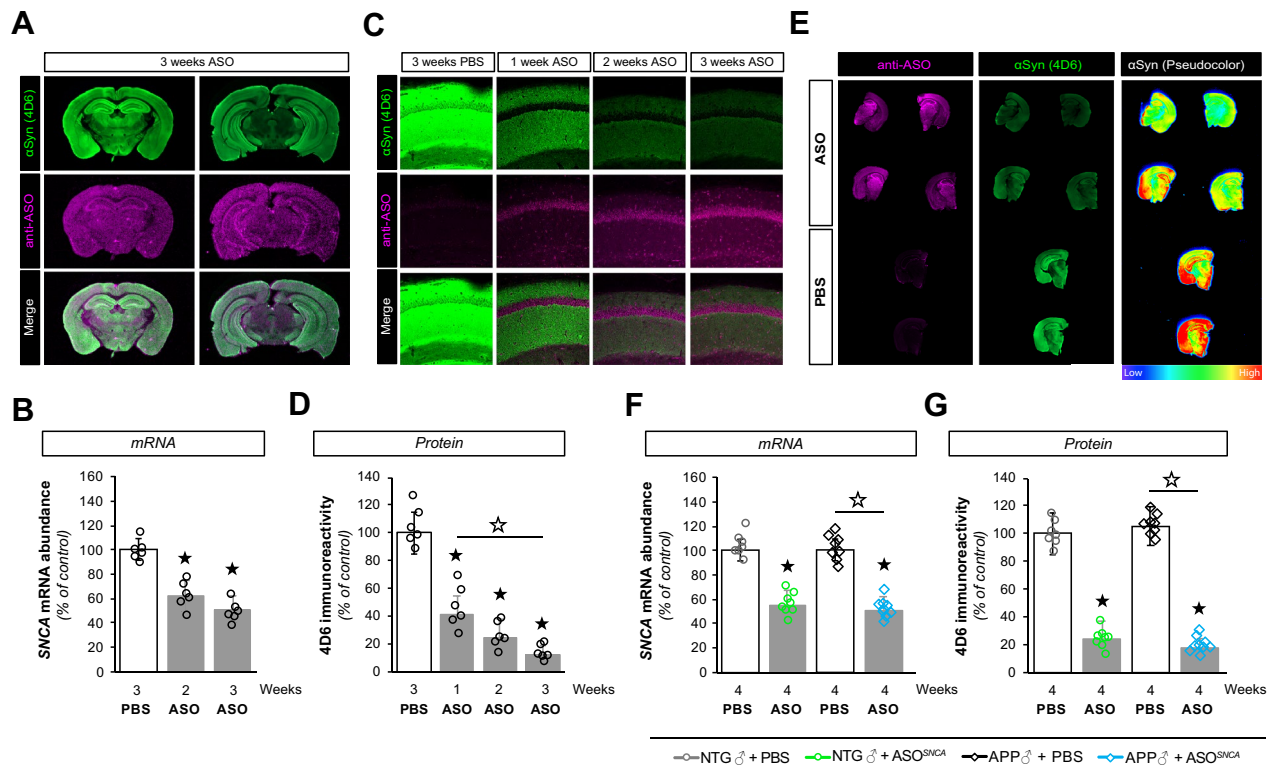


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The correct figure has been included in this correction, and the original article [1] has been corrected.

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Reference

1. Brown JL, Hart DW, Boyle GE et al (2022) NCA genetic lowering reveals differential cognitive function of alpha-synuclein dependent on sex. *Acta Neuropathol Commun* 10:180. <https://doi.org/10.1186/s40478-022-01480-y>