Check for updates

OPEN ACCESS

EDITED AND REVIEWED BY Stefania Ceruti, University of Milan, Italy

*CORRESPONDENCE Xing Li Xingli_xian@126.com

Guang-Xian Zhang ⊠ guang-xian.zhang@jefferson.edu

SPECIALTY SECTION This article was submitted to Cellular Neurophysiology, a section of the journal Frontiers in Cellular Neuroscience

RECEIVED 18 August 2022 ACCEPTED 29 November 2022 PUBLISHED 15 December 2022

CITATION

Zhang Y, Lu X-Y, Ye Z-Q, Ciric B, Ma C-G, Rostami A, Li X and Zhang G-X (2022) Corrigendum: Combination therapy with fingolimod and neural stem cells promotes functional myelination *in vivo* through a non-immunomodulatory mechanism.

Front. Cell. Neurosci. 16:1022297. doi: 10.3389/fncel.2022.1022297

COPYRIGHT

© 2022 Zhang, Lu, Ye, Ciric, Ma, Rostami, Li and Zhang. This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY). The use, distribution or reproduction in other forums is permitted, provided the original author(s) and the copyright owner(s) are credited and that the original publication in this journal is cited, in accordance with accepted academic practice. No use, distribution or reproduction is permitted which does not comply with these terms.

Corrigendum: Combination therapy with fingolimod and neural stem cells promotes functional myelination *in vivo* through a non-immunomodulatory mechanism

Yuan Zhang^{1,2}, Xin-Yu Lu², Ze-Qin Ye², Bogoljub Ciric¹, Cun-Gen Ma³, Abdolmohamad Rostami¹, Xing Li^{1,2*} and Guang-Xian Zhang^{1*}

¹Department of Neurology, Thomas Jefferson University, Philadelphia, PA, United States, ²National Engineering Laboratory for Resource Development of Endangered Crude Drugs in Northwest China, The Key Laboratory of Medicinal Resources and Natural Pharmaceutical Chemistry, The Ministry of Education, Shaanxi Normal University, Xi'an, China, ³Department of Neurology, Institute of Brain Science, Shanxi Datong University Medical School, Datong, China

KEYWORDS

fingolimod, neural stem cells, myelination, oligodendrocytes, combination therapy

A corrigendum on

Combination therapy with fingolimod and neural stem cells promotes functional myelination *in vivo* through a non-immunomodulatory mechanism

by Zhang, Y., Lu, X.-Y., Ye, Z.-Q., Ciric, B., Ma, C.-G., Rostami, A., Li, X., and Zhang, G.-X. (2019). *Front. Cell. Neurosci.* 13:14. doi: 10.3389/fncel.2019.00014

In the published article, there was an error in Figure 2 as published. Due to a mistake made during figure preparation, there was an error in the CC1-GFP-stained image in the PBS and FTY720 group of Figure 2B. The corrected Figure 2 and its caption appears below.

The authors apologize for this error and state that this does not change the scientific conclusions of the article in any way. The original article has been updated.

Publisher's note

All claims expressed in this article are solely those of the authors and do not necessarily represent those of their affiliated organizations, or those of the publisher, the editors and the reviewers. Any product that may be evaluated in this article, or claim that may be made by its manufacturer, is not guaranteed or endorsed by the publisher.



Impact of FTY720 plus NSC treatment on neural cell lineages in brain slice culture model. Brain slices obtained from newborn (P0-3) C57/Bl6 mouse pups were grown for 3 days in culture, and NSCs ($2 \mu l$, $\sim 5 \times 10^4$ cells /slice) and/or FTY720 (1 nM) were added for the subsequent 7 days; the slices were then fixed and immunostained. (**A**) Quantitative analysis of the number of transplanted NSCs (GFP+) in brain slices. (**B**) Immunofluorescence images of brain slices. Cells co-labeled with GFP and neural specific markers (red) were identified as differentiated cells derived from NSCs (yellow); cells positive only for neural-specific markers (red) were endogenous cells. CC1+: oligodendrocytes, NeuN+: neurons, GFAP+, astrocytes. Scale bar = 20 μ m. (**C**) High-magnification confocal images show that GFP (green) was highly colocalized with the *(Continued)*

FIGURE 2 (Continued)

oligodendrocyte marker MBP (red). Scale bar = $10 \,\mu$ m. (**D**) Quantification of total CC1+ cell numbers. (**E**) Quantitative analysis of differentiation of transplanted NSCs in the CNS as shown in (**B**). Symbols represent mean \pm SD; n = 10 random areas per group. ***p < 0.001. One-way ANOVA with Tukey's multiple comparisons test and unpaired Student's t-test. One representative of 3 independent experiments is shown.