CORRECTION



Correction to: Pigment Epithelium-Derived Factor Improves Paracellular Blood–Brain Barrier Integrity in the Normal and Ischemic Mouse Brain

Arina Riabinska^{1,3} · Marietta Zille^{2,4} · Menderes Yusuf Terzi^{1,5} · Ryan Cordell¹ · Melina Nieminen-Kelhä¹ · Jan Klohs^{2,6,7} · Ana Luisa Piña¹

Published online: 18 May 2020 © Springer Science+Business Media, LLC, part of Springer Nature 2020

Correction to: Cellular and Molecular Neurobiology https://doi.org/10.1007/s10571-019-00770-9

The original version of the article unfortunately contained an error in the unit of the protein concentrations under 'Stereotactic Intraparenchymal Injections' subsection in 'Methods' section. The unit should be ng/µl instead of ng/ml. Therefore, the sentence should read as follows:

For the claudin-5 expression study, solutions with the following protein concentrations were prepared: 40 ng/µl VEGF (group VEGF alone), 40 ng/µl VEGF and 40 ng/µl PEDF (group VEGF:PEDF 1:1), and 40 ng/µl VEGF and 80 ng/µl PEDF (group VEGF:PEDF 1:2).

The original article can be found online at https://doi.org/10.1007/s10571-019-00770-9.

Ana Luisa Piña ana-luisa.pina@charite.de

- ¹ Department of Neurosurgery, Experimental Neurosurgery/ BCRT, Charite-Universitätsmedizin Berlin, Campus Mitte, Chariteplatz 1/Virchowweg 21, Aschheim-Zondek-Haus 03-003, 10117 Berlin, Germany
- ² Department of Experimental Neurology, Charité-Universitätsmedizin Berlin, Berlin, Germany
- ³ Department of Internal Medicine, Medical Clinic I, University Hospital of Cologne, Cologne, Germany
- ⁴ Institute for Experimental and Clinical Pharmacology and Toxicology, University of Lübeck, Lübeck, Germany
- ⁵ Department of Medical Biology, Hatay Mustafa Kemal University, Antakya, Hatay, Turkey
- ⁶ Institute for Biomedical Engineering, ETH and University of Zurich, Zurich, Switzerland
- ⁷ Neuroscience Center Zurich, University of Zurich and ETH Zurich, Zurich, Switzerland



Accordingly, the caption of Fig. 1 should be as follows:

Fig. 1 The Co-injection of PEDF after VEGF-induced hyperpermeability reduces the paracellular blood-brain barrier disruption. **a** We wanted to confirm that VEGF induces hyperpermeability in the brain. Therefore, we administered intraparenchymal injection of 40 ng/µl VEGF or CSF to the brain. VEGF did not significantly induce the transcellular extravasation of Evans Blue (expressed as the fold change to CSF, n=3). However, we recognize that the sample size was likely not large enough to show statistical significance. **b** Compared to VEGF alone (40 ng/µl), the coadministration of PEDF (40 ng/µl) did not change the Evans Blue extravasation (n=6). **c**

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Shown are representative pictures from the claudin-5 (Cln-5) stained brain samples in mice receiving an intraparenchymal injection of CSF, VEGF, or VEGF+PEDF. Scale bar = 100 μ m. **d** The number of claudin-5-immunoreactive vessels significantly increased after the VEGF+PEDF (40 ng/µl VEGF and 40 ng/µl PEDF for VEGF:PEDF 1:1, n=11; 40 ng/µl VEGF and 80 ng/µl PEDF for VEGF:PEDF 1:2, n=9) compared to the 40 ng/µl VEGF-only treatment, indicating an improved paracellular BBB integrity. The data are represented as medians, except for the amount of claudin-5-immunoreactive vessels in VEGF+PEDF 1:2 that is presented as mean ± SD, *p < 0.05