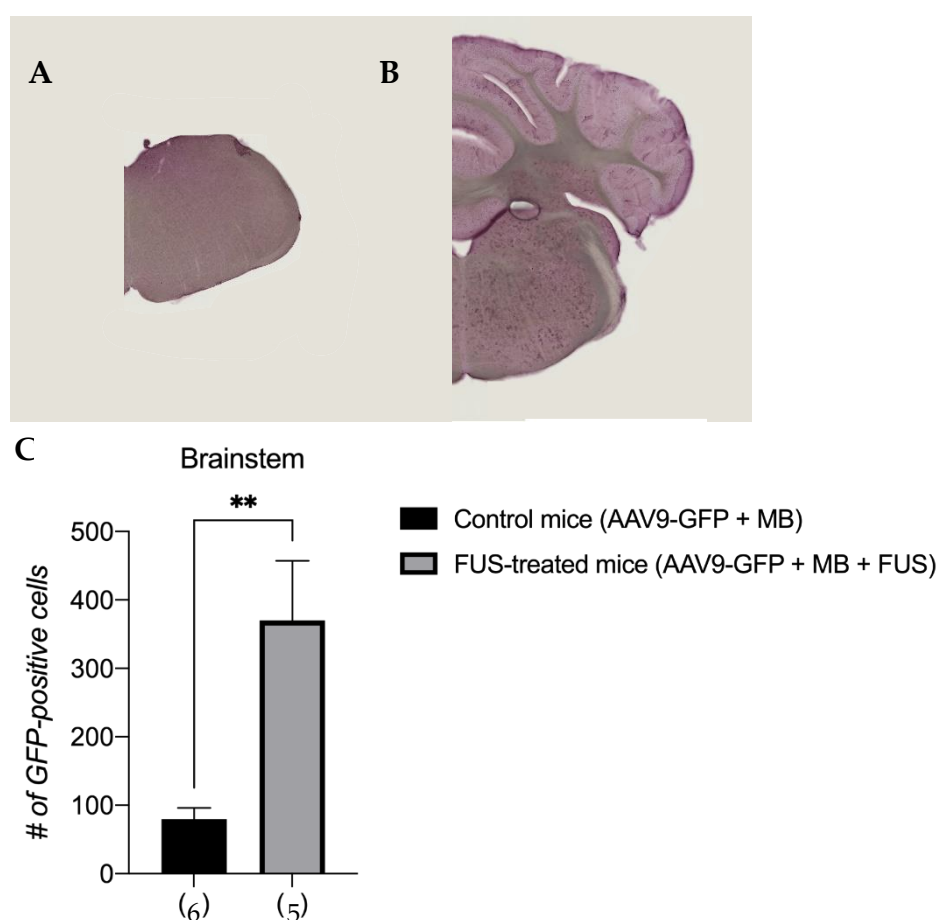
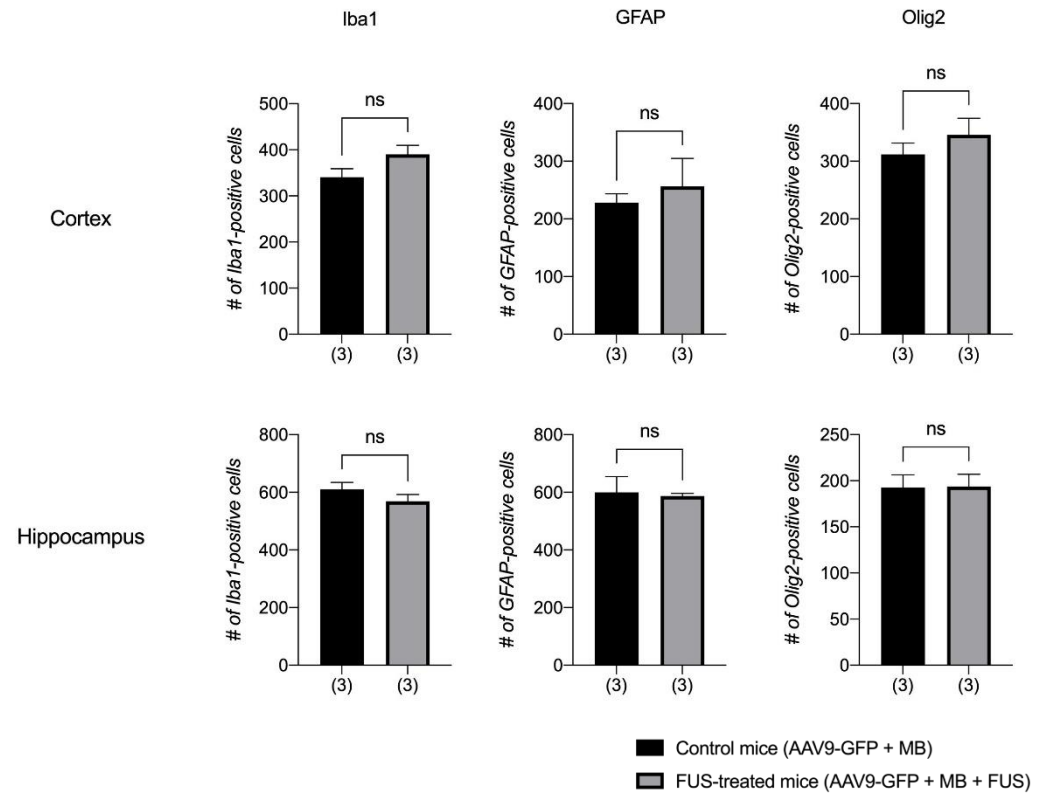


# Supplementary Materials: Ultrasound-Mediated Blood-Brain Barrier Opening Improves Whole Brain Gene Delivery in Mice

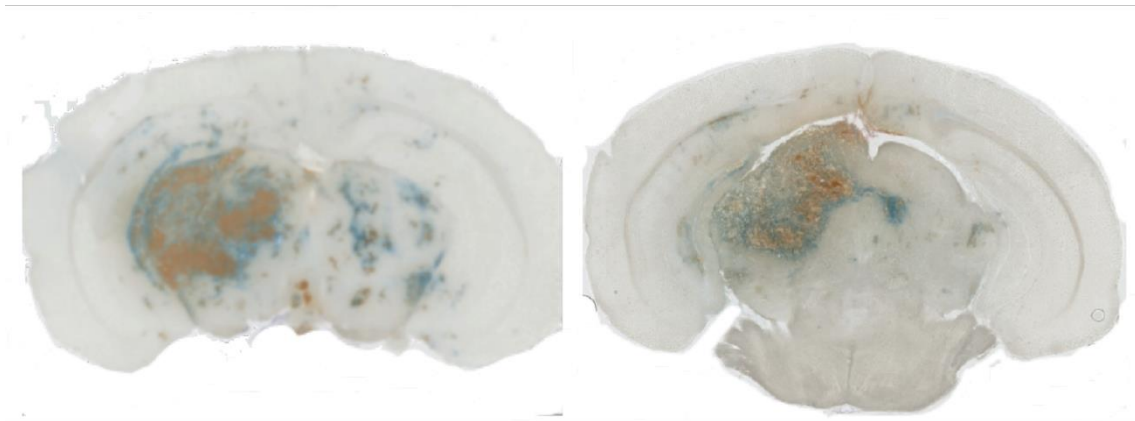
Marie-Solenne Felix, Emilie Borloz, Khaled Metwally, Ambre Dauba, Benoit Larrat, Valerie Matagne, Yann Ehinger, Laurent Villard, Anthony Novell, Serge Mensah and Jean-Christophe Roux



**Figure S1.** Immunohistochemistry using anti-GFP antibody showed an increase in the number of GFP-positive cells in the brainstem of FUS-treated mice. Representative images with the GFP protein stained in violet are shown above the graph for control mice (A) and FUS-treated mice (B). The number of GFP-positive cells was counted using the Fiji software (C). Mean + SEM are represented by vertical bars, \*\*  $p < 0.01$  Mann-Whitney rank-sum test, (n) number of animals per group.



**Figure S2.** Immunohistochemistry using anti-Iba1, GFAP and Olig2 antibodies did not show any increase in the number of positive cells in the cortex and the hippocampus of FUS-treated mice. Mean + SEM are represented by vertical bars, ns: non-significant, Mann-Whitney rank-sum test, (*n*) number of animals per group.



**Figure S3.** Important cerebral hemorrhages after FUS application at a peak negative pressure of 0.82 MPa in situ.