

Supplementary Materials

Molecular Imaging of Ultrasound-Mediated Blood-Brain Barrier Disruption in a Mouse Orthotopic Glioblastoma Model

Chiara Bastiancich ^{1,†}, Samantha Fernandez ^{2,†}, Florian Correard ³, Anthony Novell ⁴,
Benoit Larrat ⁵, Benjamin Guillet ^{2,6,*‡} and Marie-Anne Estève ^{3,*‡}

¹ CNRS, INP, Inst Neurophysiopathol, Aix-Marseille University, 13005 Marseille, France

² Centre Européen de Recherche en Imagerie Médicale (CERIMED), CNRS, Aix-Marseille University, 13005 Marseille, France

³ APHM, CNRS, INP, Inst Neurophysiopathol, Hôpital Timone, Service Pharmacie, Aix Marseille University, 13005 Marseille, France

⁴ CEA, CNRS, Inserm, BioMaps, Service Hospitalier Frédéric Joliot, Université Paris-Saclay, 91401 Orsay, France

⁵ CEA, CNRS, NeuroSpin/BAOBAB, Université Paris-Saclay, 91191 Gif-sur-Yvette, France

⁶ Centre de Recherche en Cardiovasculaire et Nutrition (C2VN), INSERM, INRAE, Aix-Marseille University, 13005 Marseille, France

* Correspondence: benjamin.guillet@univ-amu.fr (B.G.); marie-anne.esteve@univ-amu.fr (M.-A.E.)

† These authors contributed equally to this work.

‡ These authors contributed equally to this work.

Supplementary data

Section S1. BBB permeabilization and [99mTc]Tc-DTPA SPECT/CT imaging on healthy and tumor-bearing animals: raw data.

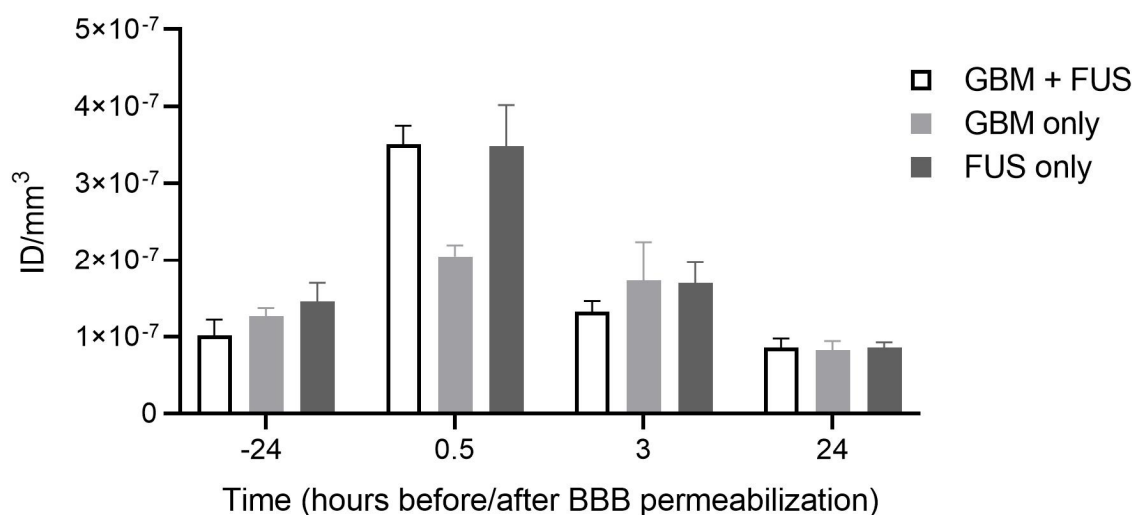


Figure S1. Quantification of [99mTc]Tc-DTPA activity in animals of group “GBM+FUS” (tumor-bearing animals undergoing FUS-mediated BBB permeabilization, $n = 5$), group “GBM only” (tumor-bearing animals without FUS-mediated BBB permeabilization, $n = 5$) and group “FUS only” (healthy animals undergoing FUS-mediated BBB permeabilization, $n = 4$). Results are expressed as injected dose per tissue volume (ID/mm³; mean ± SEM).

Section S2. BBB permeabilization and [18F]FDG PET/CT imaging on healthy and tumor-bearing animals: raw data.

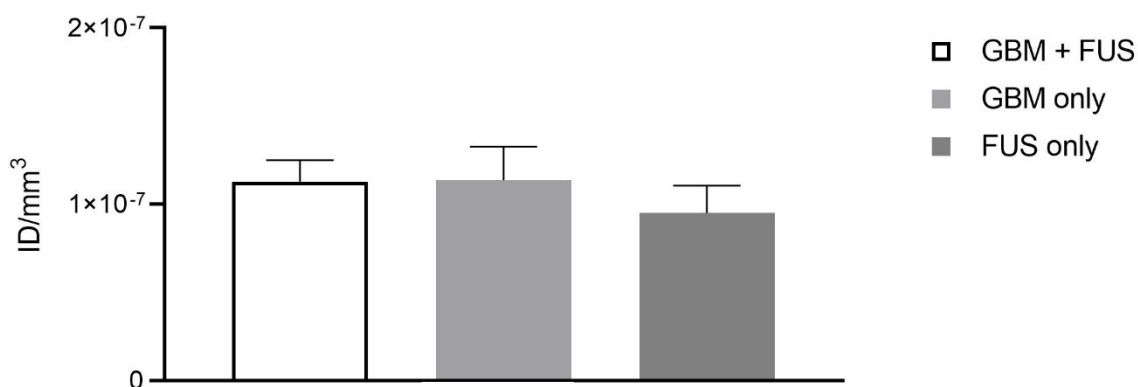


Figure S2. Quantification of [18F]FDG activity in animals of group “GBM+FUS” (tumor-bearing animals undergoing FUS-mediated BBB permeabilization, $n = 5$), group “GBM only” (tumor-bearing animals without FUS-mediated BBB permeabilization, $n = 5$) and group “FUS only” (healthy animals undergoing hemispheric FUS-mediated BBB permeabilization, $n = 4$). Results are expressed as injected dose per tissue volume (ID/mm³; mean \pm SEM).