



OPEN ACCESS

EDITED AND REVIEWED BY
Ellen Ackerstaff,
Memorial Sloan Kettering Cancer
Center, United States

*CORRESPONDENCE
Diana Yuzhakova
yuzhakova-diana@mail.ru
Vladislav Shcheslavskiy
vis@becker-hickl.de

[†]These authors have contributed
equally to this work

SPECIALTY SECTION
This article was submitted to
Cancer Imaging and
Image-directed Interventions,
a section of the journal
Frontiers in Oncology

RECEIVED 09 September 2022
ACCEPTED 15 September 2022
PUBLISHED 29 September 2022

CITATION
Yuzhakova D, Kiseleva E,
Shirmanova M, Shcheslavskiy V,
Sachkova D, Snopova L, Bederina E,
Lukina M, Dudenkova V,
Yusubalieva G, Belovezhets T,
Matvienko D and Baklaushev V (2022)
Corrigendum: Highly invasive
fluorescent/bioluminescent patient-
derived orthotopic model of
glioblastoma in mice.
Front. Oncol. 12:1040637.
doi: 10.3389/fonc.2022.1040637

COPYRIGHT
© 2022 Yuzhakova, Kiseleva,
Shirmanova, Shcheslavskiy, Sachkova,
Snopova, Bederina, Lukina, Dudenkova,
Yusubalieva, Belovezhets, Matvienko and
Baklaushev. 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: Highly invasive fluorescent/bioluminescent patient-derived orthotopic model of glioblastoma in mice

Diana Yuzhakova^{1†}, Elena Kiseleva^{1†}, Marina Shirmanova¹,
Vladislav Shcheslavskiy^{1,2*}, Daria Sachkova^{1,3},
Ludmila Snopova¹, Evgeniya Bederina¹, Maria Lukina^{1,4},
Varvara Dudenkova¹, Gaukhar Yusubalieva^{5,6},
Tatyana Belovezhets⁷, Daria Matvienko⁷
and Vladimir Baklaushev^{5,6}

¹Institute of Experimental Oncology and Biomedical Technologies, Privolzhsky Research Medical University, Nizhny Novgorod, Russia, ²R&D Department, Becker&Hickl GmbH, Berlin, Germany,

³Institute of Biology and Biomedicine, Lobachevsky State University of Nizhny Novgorod, Nizhny Novgorod, Russia, ⁴Laboratory of Molecular Oncology, Federal Research and Clinical Center of Physical and Chemical Medicine, Moscow, Russia, ⁵Biomedical Research Center, Federal Research and Clinical Center, Federal Medical and Biological Agency, Moscow, Russia, ⁶Laboratory of Molecular Mechanisms of Regeneration and Aging, Engelhardt Institute of Molecular Biology, Moscow, Russia, ⁷Department of Molecular Immunology, Institute of Molecular and Cellular Biology SB RAS, Novosibirsk, Russia

KEYWORDS

glioblastoma (GBM), primary cell line, patient-derived xenograft (PDX), fluorescence imaging, FLIM (fluorescence lifetime imaging microscopy)

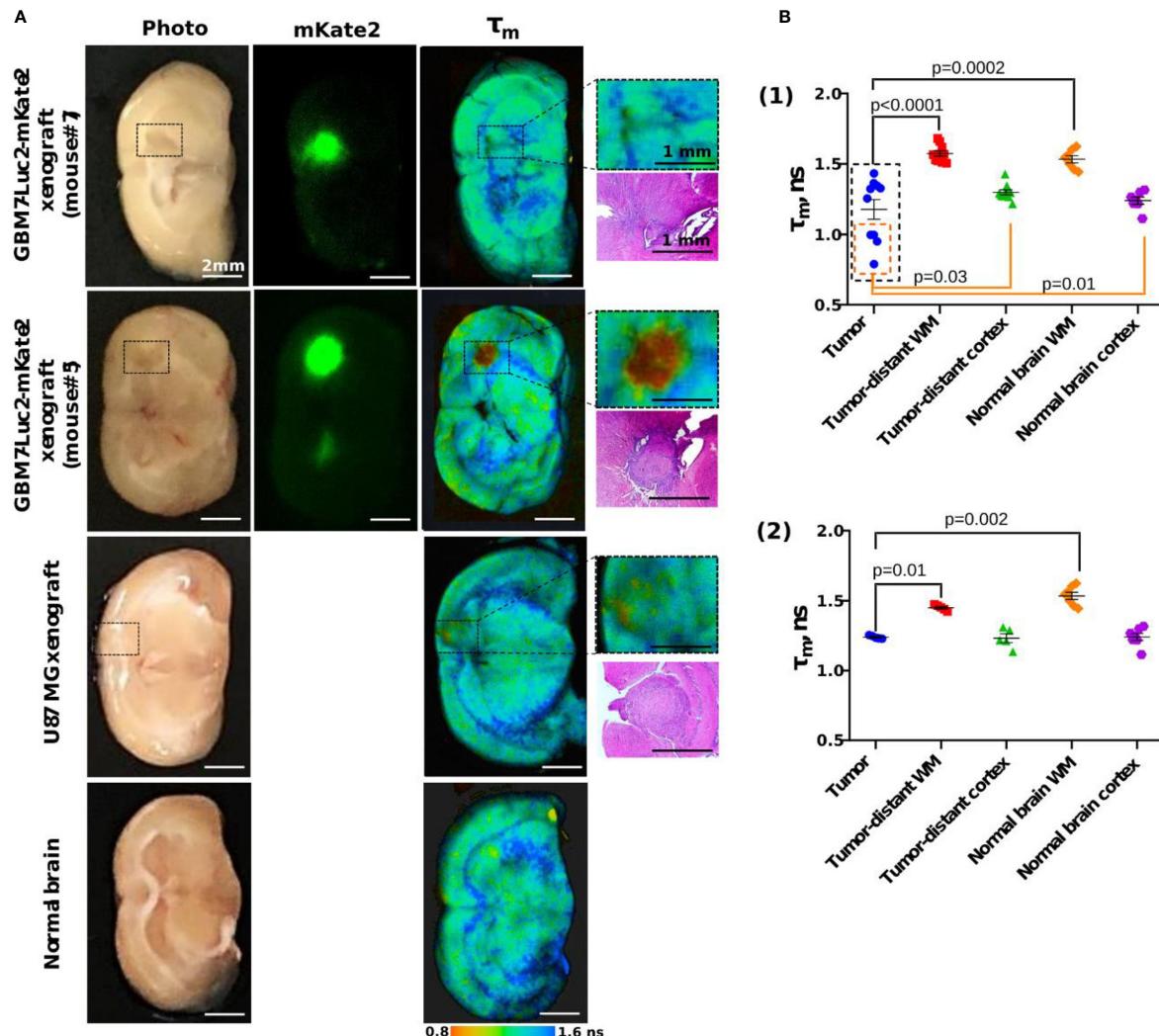
A corrigendum on

Highly invasive fluorescent/bioluminescent patient-derived orthotopic model of glioblastoma in mice

by Yuzhakova D, Kiseleva E, Shirmanova M, Shcheslavskiy V, Sachkova D, Snopova L, Bederina E, Lukina M, Dudenkova V, Yusubalieva G, Belovezhets T, Matvienko D and Baklaushev V (2022). *Front. Oncol.* 12:897839. doi: 10.3389/fonc.2022.897839

In the published article, there was an error in the order for Figure 7 and Figure 8 as published. The images from Figure 7 and Figure 8 were interchanged, while the Figure legends were in the right places. The corrected Figure 7 and Figure 8 appear below.

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

**FIGURE 7**

Macro-FLIM of human GBM xenografts and normal brain. **(A)** Representative autofluorescence time-resolved images of GBM7-Luc2-mKate2 xenografts, U87 MG xenograft and normal mouse brain without tumor. Enlarged regions with a tumor are indicated by the black squares on the lower-magnification panel. Corresponding H&E stained section is presented under each enlarged region. **(B)** Quantification of the mean fluorescence lifetime τ_m in NAD(P)H spectral channel in (1) dual-labeled human GBM xenografts and (2) U87 MG xenografts and normal brain. Scatter dot plot displays the measurements for individual animals (dots) and the mean and SEM (horizontal lines). WM is a white matter.

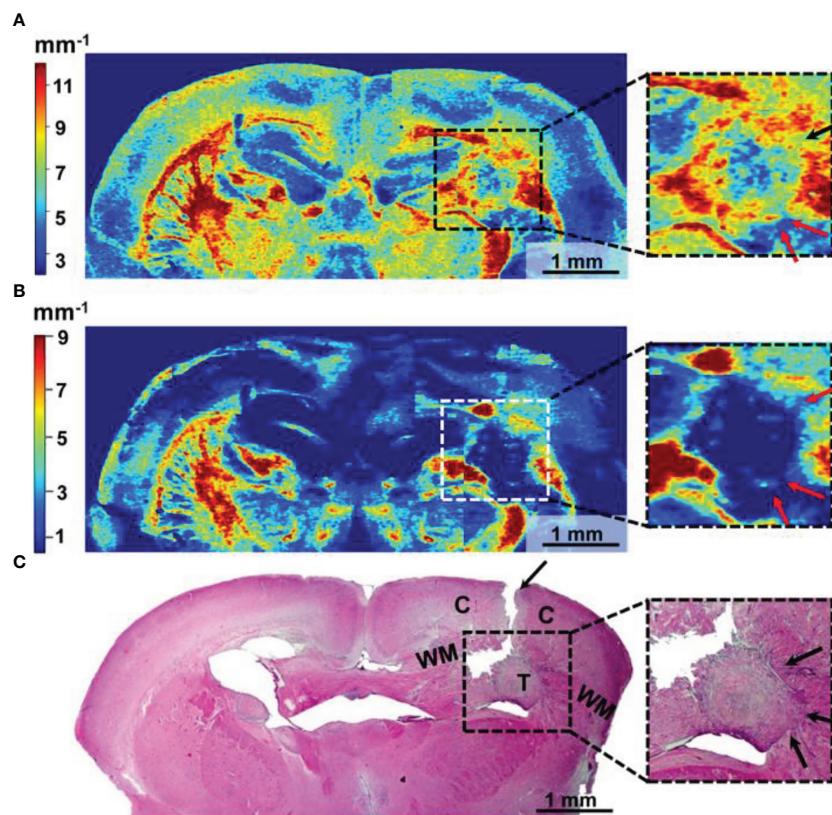


FIGURE 8

Wide-field OCT color-coded maps of the mouse brain with GBM7-Luc2-mKate2 tumor (A, B) and corresponding histology (C). Color-coded maps based on two optical coefficients calculation: attenuation in co-channel (Att_{co}) (A) and in cross-channel ($\text{Att}_{\text{cross}}$) (B). Perifocal areas of high cancer density are marked with arrows (see enlarged fragments). T, tumor; C, cortex; WM, white matter.

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.