Accepted Manuscript

Visualizing glioma margins by real-time tracking of y-glutamyltranspeptidase activity

Yingchao Liu, Jie Tan, Yi Zhang, Jianfeng Zhuang, Mingxu Ge, Ben Shi, Jiao Li, Ge Xu, Shangchen Xu, Chunhai Fan, Chunchang Zhao

PII: S0142-9612(18)30317-X

DOI: 10.1016/j.biomaterials.2018.04.053

Reference: JBMT 18639

To appear in: Biomaterials

Received Date: 25 November 2017

Revised Date: 19 April 2018 Accepted Date: 26 April 2018

Please cite this article as: Liu Y, Tan J, Zhang Y, Zhuang J, Ge M, Shi B, Li J, Xu G, Xu S, Fan C, Zhao C, Visualizing glioma margins by real-time tracking of γ-glutamyltranspeptidase activity, *Biomaterials* (2018), doi: 10.1016/j.biomaterials.2018.04.053.

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



ACCEPTED MANUSCRIPT

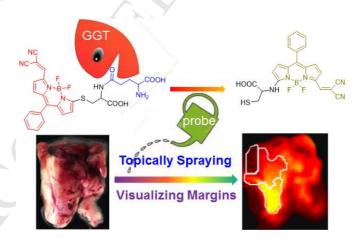
Visualizing Glioma Margins by Real-Time Tracking of γ -Glutamyltranspeptidase Activity

Yingchao Liu,¹ Jie Tan,² Yi Zhang,³ Jianfeng Zhuang,¹ Mingxu Ge,¹ Ben Shi,² Jiao Li,² Ge Xu,² Shangchen Xu,*,¹ Chunhai Fan,*,⁴ Chunchang Zhao*,²

- ¹ Department of Neurosurgery, Provincial Hospital Affiliated to Shandong University, Jinan, P. R. China, 250021
- ² Key Laboratory for Advanced Materials and Institute of Fine Chemicals, School of Chemistry and Molecular Engineering, East China University of Science & Technology, Shanghai, P. R. China, 200237
- ³ Shandong Medical Imaging Research Institute, Shandong University, Jinan, P. R. China, 250021
- ⁴ CAS Key Laboratory of Interfacial Physics and Technology, Shanghai Institute of Applied Physics Chinese Academy of Sciences Shanghai, P. R. China, 201800

E-mail: zhaocchang@ecust.edu.cn; shangchenxu@sina.com; fchh@sinap.ac.cn

Table of Contents



Abstract: Distinguishing tumor from adjacent non-cancerous tissue can be problematic during surgical treatment of malignant glioma. Consequently, a novel approach to selective discrimination is required. The goal of this study was to determine whether a fluorescent probe activated by γ -Glutamyltranspeptidase (GGT), an enzyme that is overexpressed on glioma cell membranes but only

Download English Version:

https://daneshyari.com/en/article/6484473

Download Persian Version:

https://daneshyari.com/article/6484473

<u>Daneshyari.com</u>