Supplementary file

Loco-regional treatment with temozolomide-loaded thermogels prevents glioblastoma recurrences in orthotopic human xenograft models.

Lisa Gherardini^{1,#}, Veronica Vetri Buratti^{2,#}, Mirko Maturi², Giovanni Inzalaco^{1,3,4}, Erica Locatelli², Letizia Sambri², Sara Gargiulo¹, Virginia Barone⁵, Denise Bonente^{5,6}, Eugenio Bertelli⁵, Silvia Tortorella², Lorenzo Franci^{1,3}, Antonio Fioravanti⁷, Mauro Comes Franchini^{2,*}, Mario Chiariello^{1,3,*}

¹Istituto di Fisiologia Clinica (IFC), Consiglio Nazionale delle Ricerche (CNR), Via Fiorentina 1, 53100, Siena, Italy; email: lisa.gherardini@cnr.it; sara.gargiulo@cnr.it

²Department of Industrial Chemistry "Toso Montanari" University of Bologna Viale Risorgimento 4, 40126, Bologna, Italy; email: veronica.vetri2@unibo.it; mirko.maturi2@unibo.it; erica.locatelli2@unibo.it; letizia.sambri@unibo.it; silvia.tortorella2@unibo.it

³Core Research Laboratory (CRL), Istituto per lo Studio, la Prevenzione e la Rete Oncologica (ISPRO), Via Fiorentina 1, 53100, Siena, Italy

⁴University of Siena, Via Banchi di Sotto 55, 53100, Siena Italy; email: inzalaco@student.unisi.it

⁵Department of Molecular and Developmental Medicine, University of Siena, Via Aldo Moro 2, 53100, Siena, Italy; email: virginia.barone@unisi.it; mail eugenio.bertelli@unisi.it

⁶Department of Life Sciences, University of Siena, 53100, Siena, Italy; email: denise.bonente@student.unisi.it

⁷Ospedale Maggiore (ASST) Largo Ugo Dossena 2, 26013, Crema, Italy; email: antonio.fioravanti@asst-cremona.it

[#]These authors contributed equally to the work.

*Correspondence:

Prof. Mauro Comes Franchini, PhD, Department of Industrial Chemistry "Toso Montanari", University of Bologna, Viale Risorgimento 4, 40126, Bologna, Italy Ph: +39 051 2093631 email: mauro.comesfranchini@unibo.it;

Mario Chiariello, MD, PhD, Istituto di Fisiologia Clinica (IFC), Consiglio Nazionale delle Ricerche (CNR), Via Fiorentina 1, 53100, Siena, Italy; Ph: +39057232174, email: mario.chiariello@cnr.it

Supplementary Figures





Fig. S1: Rotational viscosity of THG@SiO2-TMZ and THG@PCL-TMZ as a function of the applied shear rate.

Fig S2



Fig. S2: The general well-being of the animals in the study was monitored by measuring the body weight from the start of the procedures up to the sacrifice. No statistical difference was detected among groups (ANOVA p value= 0,5527).



Fig. S3: Quantification of TMZ via HPLC. Left: TMZ concentration and the corresponding HPLC peak area for the calibration samples. Right: calibration curve with the corresponding curve equation.