Electronic Supplementary Material

Targeting orthotopic gliomas with renal-clearable luminescent gold nanoparticles

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Supporting information to DOI 10.1007/s12274-017-1472-z



Figure S1 Dynamic light scattering (DLS) analysis of AuNPs.



Figure S2 Absorbance spectra of glycine-coated AuNPs (Gly-AuNPs) and glutathione-coated AuNPs (GS-AuNPs) with 18 nm size as well as GSH.

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Figure S3 Surface charge of 18 nm AuNPs before and after glutathione replacement, which was characterized as the zeta potential values of 18 nm Gly-AuNPs and GS-AuNPs.



Figure S4 Whole brain *ex vivo* fluorescence imaging for gliomas in early stage (3 to 5 mm), which showed limited positioning information.



Figure S5 Distribution of 3 nm AuNPs in tumor and normal brain tissues at 24 h p.i. with or without perfusion, respectively (n = 3). The distribution of 3 nm AuNPs with perfusion was about 56.2% of that without perfusion, which means around 43.8% of AuNPs were removed by perfusion.