Supporting Information

In vivo cancer targeting and fluorescence-CT dual-modal imaging

with nano-probe based on silver sulfide quantum dots and iodinate oil

Meng-Yao Qin‡, Xiao-Quan Yang‡, Kan Wang, Xiao-Shuai Zhang, Ji-Tao Song, Ming-Hao Yao, Dong-Mei Yan, Bo Liu* and Yuan-Di Zhao*

Britton Chance Center for Biomedical Photonics at Wuhan National Laboratory for Optoelectronics - Hubei Bioinformatics & Molecular Imaging Key Laboratory, Department of Biomedical Engineering, College of Life Science and Technology, Huazhong University of Science and Technology, Wuhan 430074, P. R. China

* Corresponding author.
Tel./Fax: +86 27-8779-2202.
Email address: zydi@mail.hust.edu.cn (Y. D. Zhao); lbyang@mail.hust.edu.cn (B. Liu)
‡ These authors equally contributed to this article.

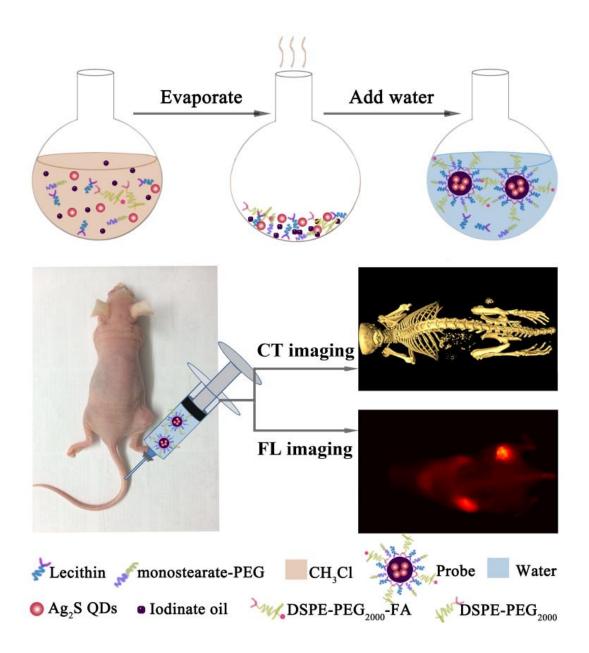


Figure S1. Schematic illustration of Ag₂S-I@DSPE-PEG₂₀₀₀-FA for *in vivo* X-ray CT and fluorescence dual mode imaging.

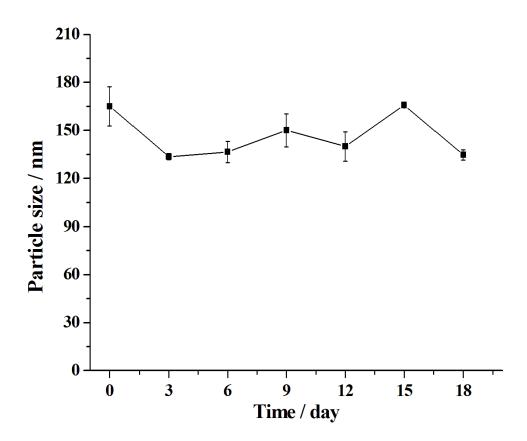


Figure S2 Changes in mean particle size of Ag₂S-I@DSPE-PEG₂₀₀₀-FA during storage at 4 °C.

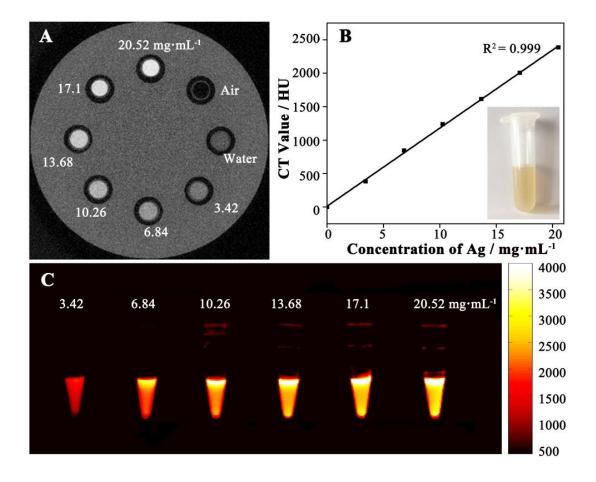


Figure S3. CT-fluorescence imaging of $Ag_2S-I@DSPE-PEG_{2000}$ -FA probe of different concentrations. Sectional view of CT imaging (A); linear relationship between the HU value and concentration of the probe, the Insert was its white map (B); overall fluorescence image(C).

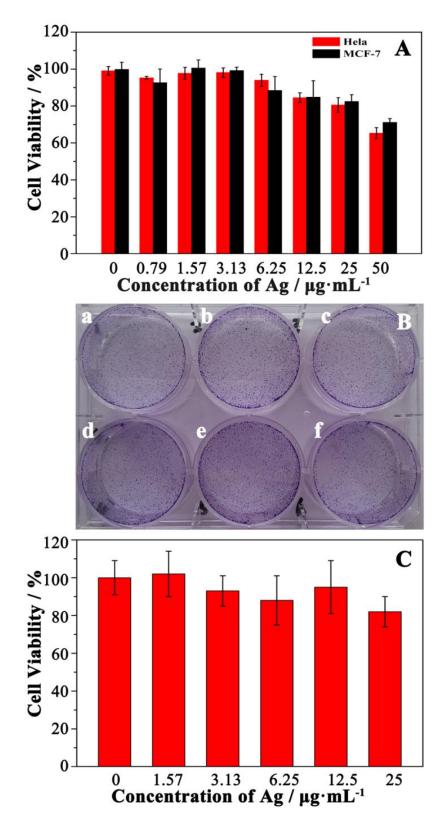


Figure S4. Cytotoxicity of Ag₂S-I@DSPE-PEG₂₀₀₀-FA with different concentrations (0, 1.57, 3.13, 6.25, 12.5 and 25 μ g/mL Ag). MTT assay of HeLa and MCF-7 cells (A); Colony Formation Assay of HeLa cells (B); statistics results of colonies in Colony Formation Assay (C).

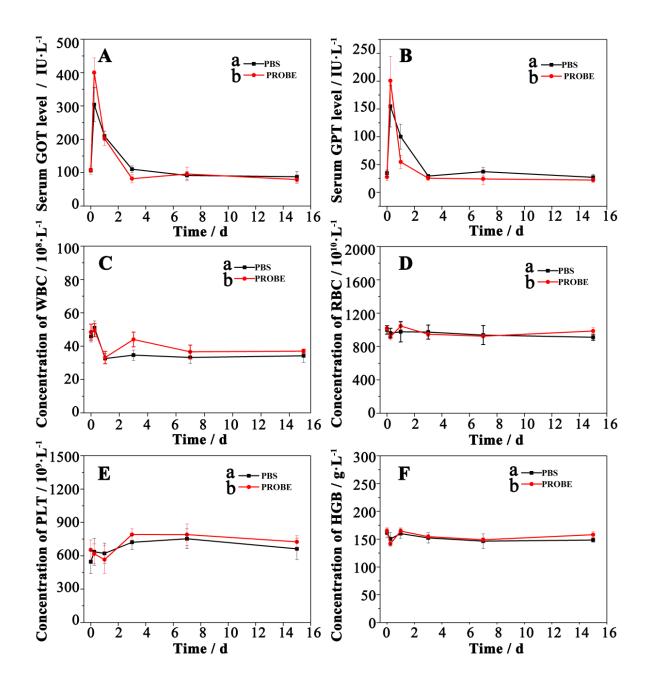


Figure S5. Analysis of blood samples of mice after injecting Ag₂S-I@DSPE-PEG₂₀₀₀-FA (n=5). A: GOT; B: GPT; C: WBC; D: RBC; E: PLT; F: HGB. a: control group injected with PBS; b: experimental group with probe.