## Supporting Information

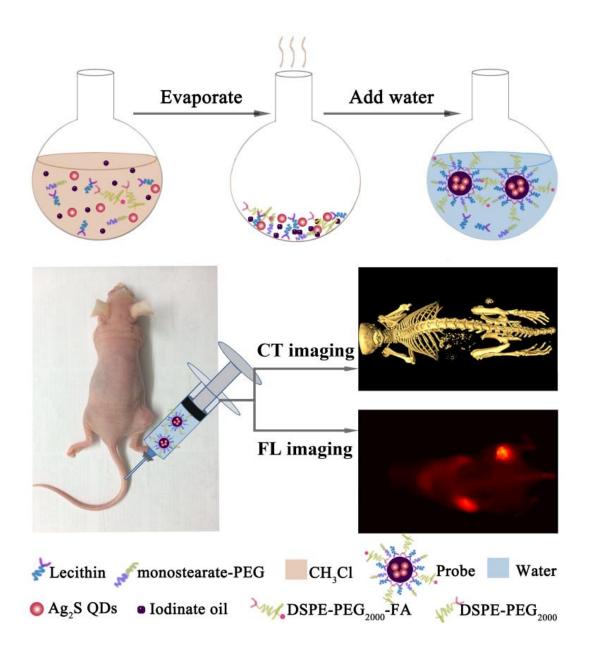
## *In vivo* cancer targeting and fluorescence-CT dual-modal imaging

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

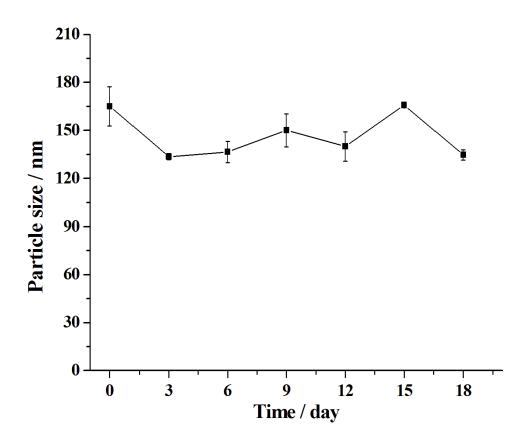
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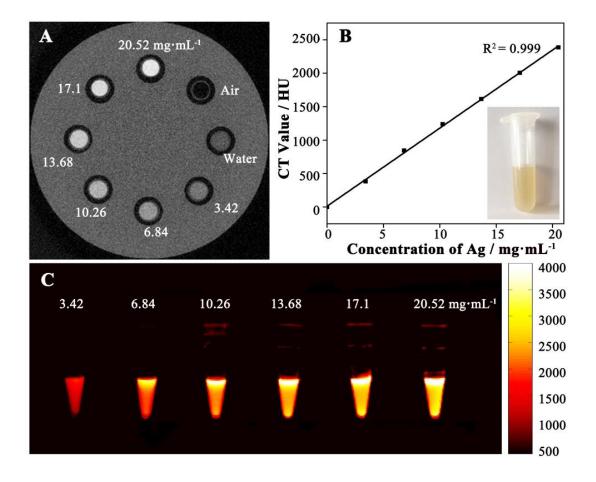
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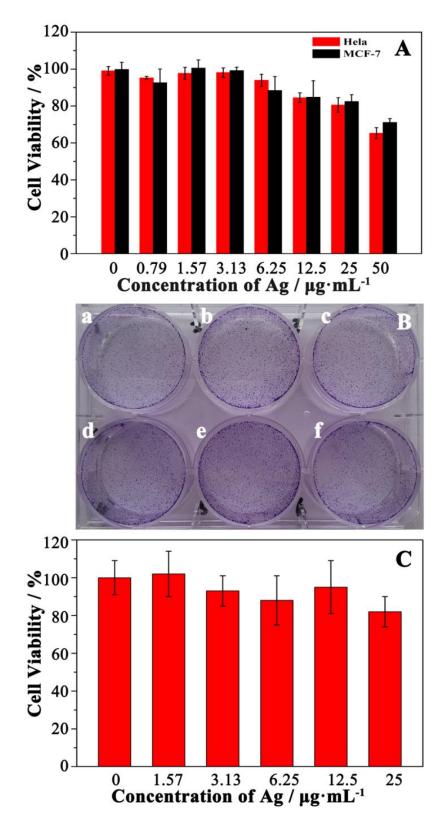
**Figure S1.** Schematic illustration of Ag<sub>2</sub>S-I@DSPE-PEG<sub>2000</sub>-FA for *in vivo* X-ray CT and fluorescence dual mode imaging.



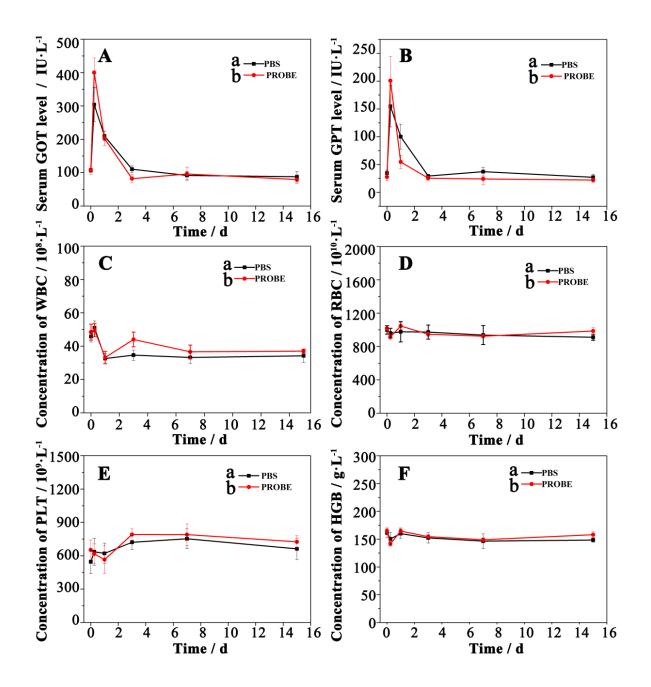
**Figure S2** Changes in mean particle size of Ag<sub>2</sub>S-I@DSPE-PEG<sub>2000</sub>-FA during storage at 4 °C.



**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 Ag<sub>2</sub>S-I@DSPE-PEG<sub>2000</sub>-FA with different concentrations (0, 1.57, 3.13, 6.25, 12.5 and 25  $\mu$ 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 Ag<sub>2</sub>S-I@DSPE-PEG<sub>2000</sub>-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.