Electronic Supplementary Information (ESI)

Lipid-micelles packaged with semiconducting polymer dots as simultaneous MRI / photoacoustic imaging and photodynamic /photothermal dual-modal therapeutic agents for liver cancer

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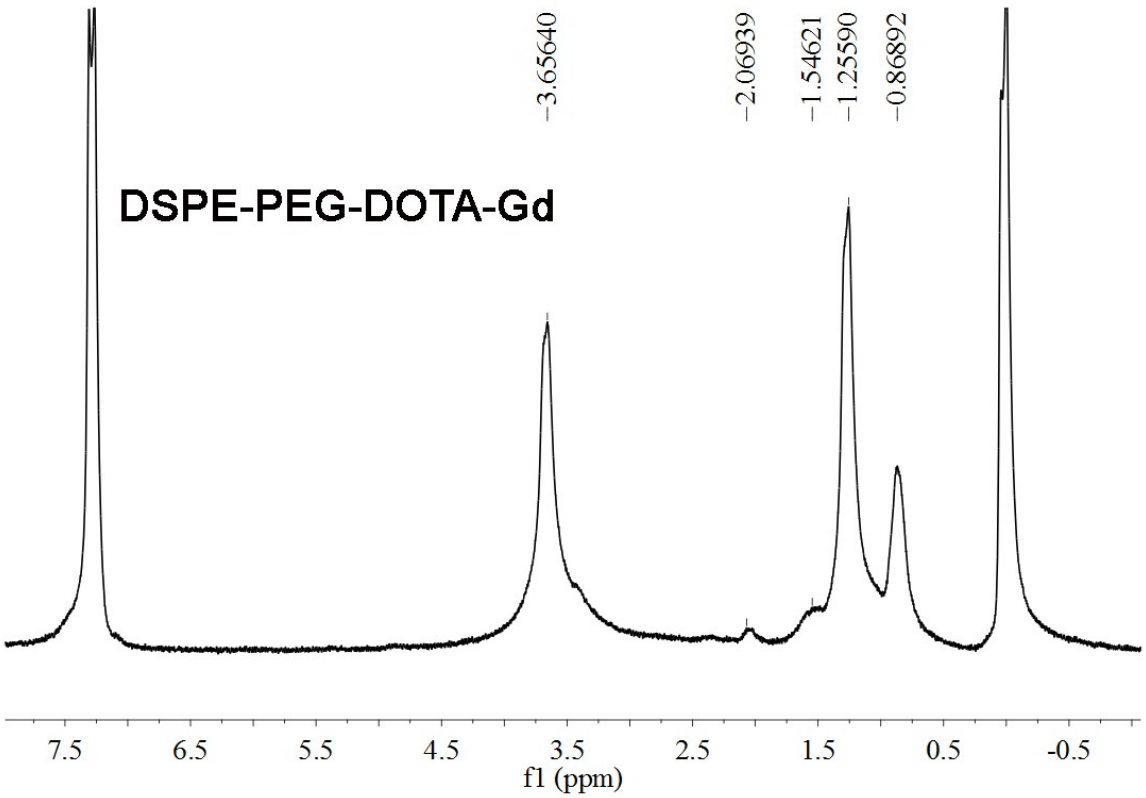
Figure S1



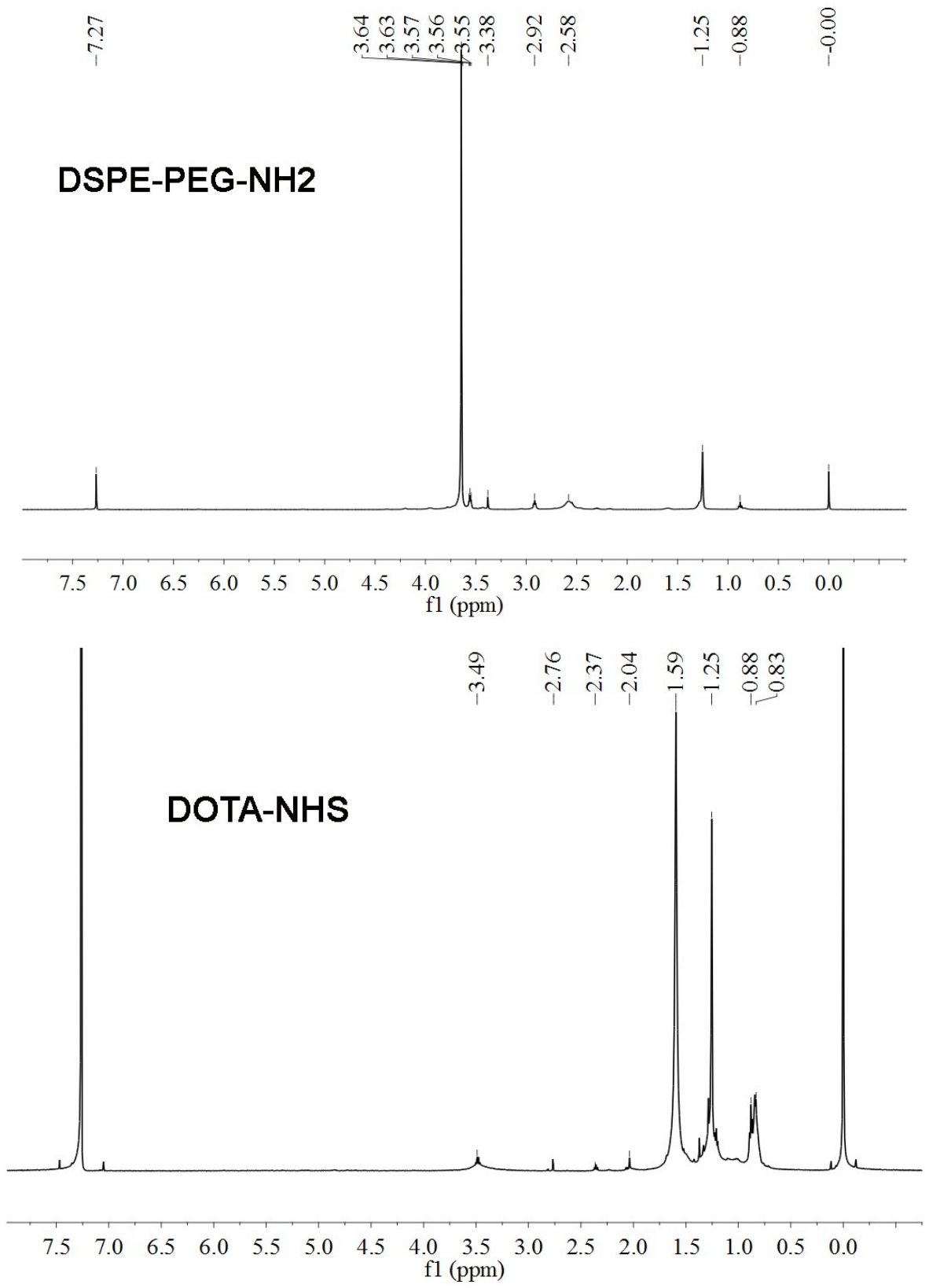


Figure S1. ^{1}H NMR spectra of lipid-Gd-DOTA (DSPE-PEG-DOTA-Gd), lipid-PEG (DSPE-PEG-NH_2) and DOTA-NHS.

Figure S2

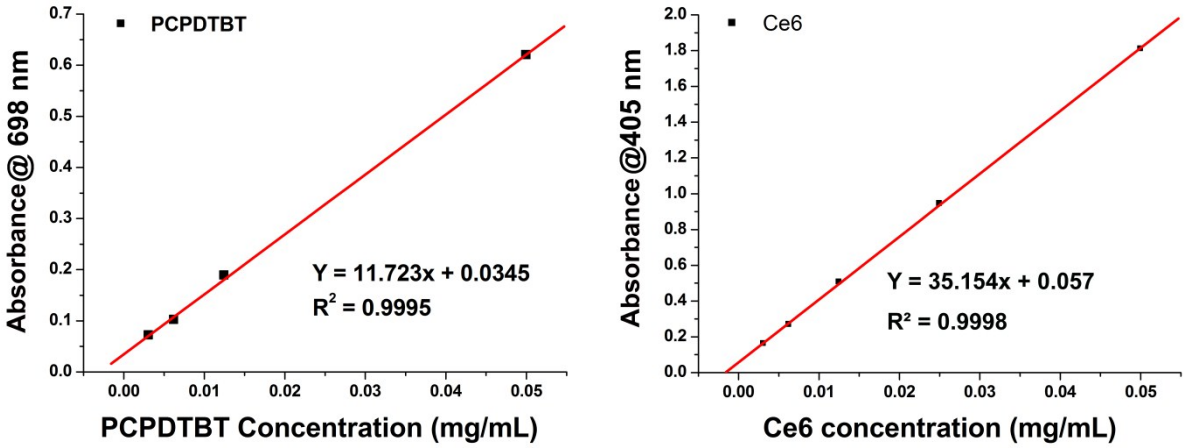


Figure S2. the linear fit of the absorbance of various concentration of PCPDTBT from 0.003125 to 0.05mg/mL in THF (left); The linear fit of the absorbance of various concentration of Ce6 from 0.003125 to 0.05mg/mL in DMSO (right).

Figure S3

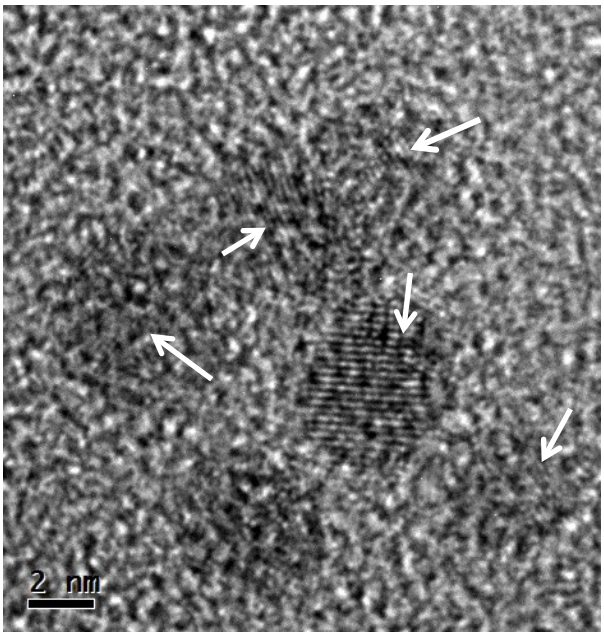


Figure S3. Enlarged TEM image of the prepared Pdots from Pdots/Ce6@lipid-Gd-DOTA micelles (scale bar = 2 nm).

Figure S4

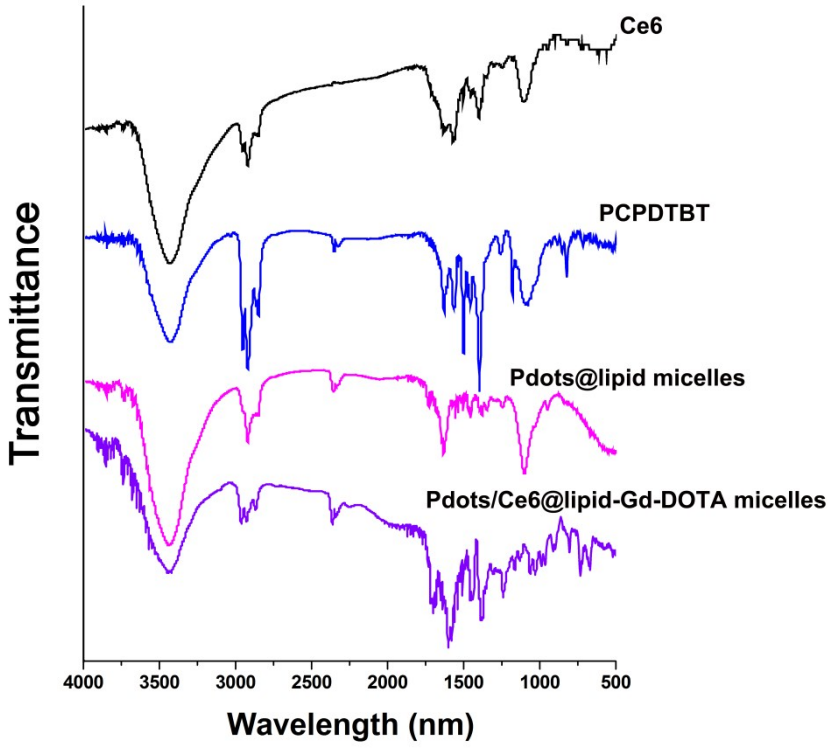


Figure S4. The FT-IR spectra of the free Ce6, PCPDTBT, Pdots@lipid micelles and Pdots/Ce6@lipid-Gd-DOTA micelles.

Figure S5

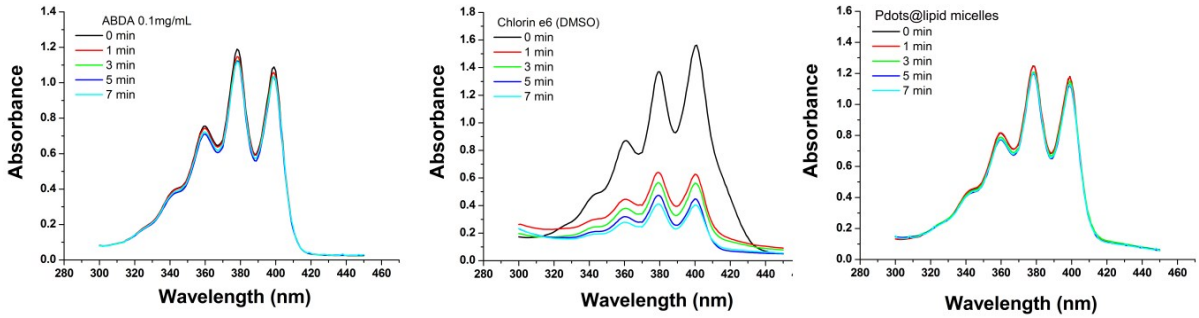


Figure S5. The absorbance of 9, 10-dimethylanthracene (ABDA, 20 mM) after photodecomposition by ROS generation upon NIR laser irradiation. (a) ABDA in water(670 nm, 0.5 W/cm^2); (b) free Ce6 in DMSO (670 nm, 0.5 W/cm^2); (c) Pdots@lipid micelles in water (670 nm, 0.5 W/cm^2).

Figure S6

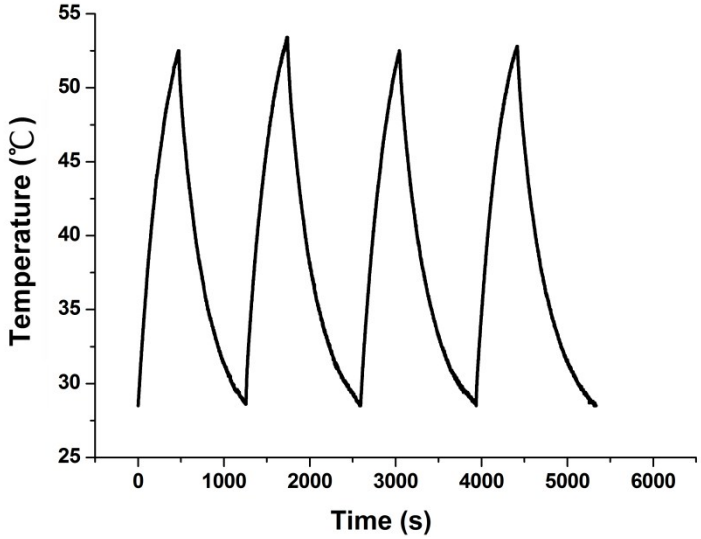


Figure S6. Temperature elevaltion curves of Pdots/Ce6@lipid-Gd-DOTA micelles over four rounds of 670 nm laser on/off cycling at power intensity of 0.5 W/cm^2.

Figure S7

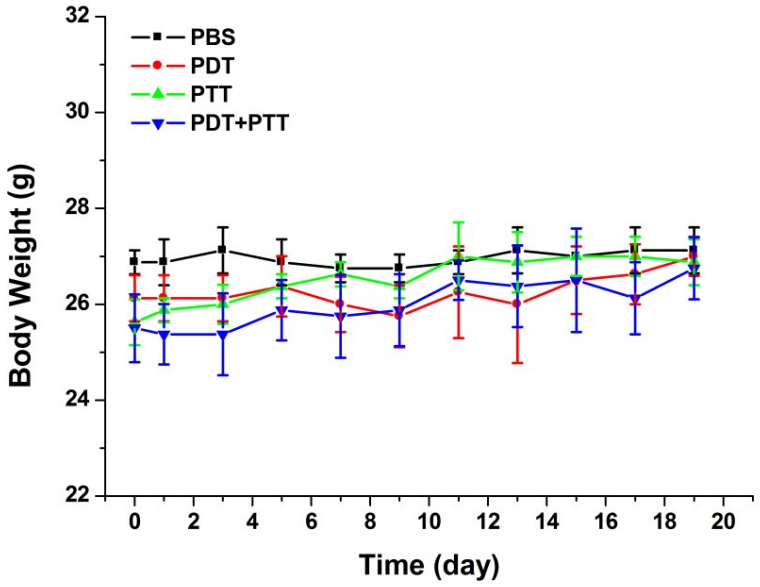


Figure S7. Mean body weights of mice in different groups after treatment (n = 4).

Figure S8

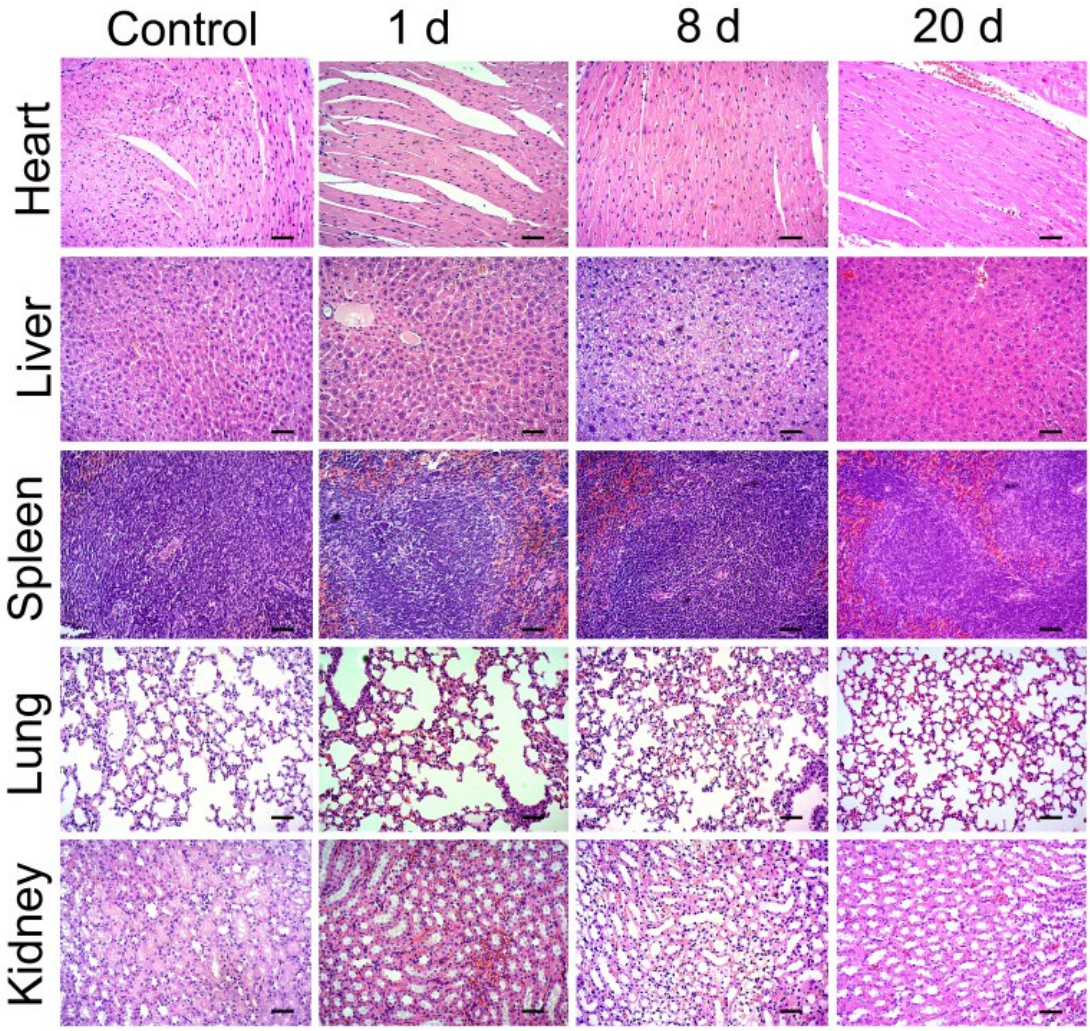


Figure S8. The pathological changes of main organs evaluated by H&E staining which were acquired at different time intervals post intravenous injection of Pdots/Ce6@lipid-Gd-DOTA micelles. (Scale bar: 50 μm). No noticeable pathological changes were observed in these organs.