Electronic Supplementary Material (ESI) for New Journal of Chemistry.

Supporting information

Red blood cell membrane-coated biomimetic upconversion nanoarchitecture for synergistic chemo-photodynamic therapy

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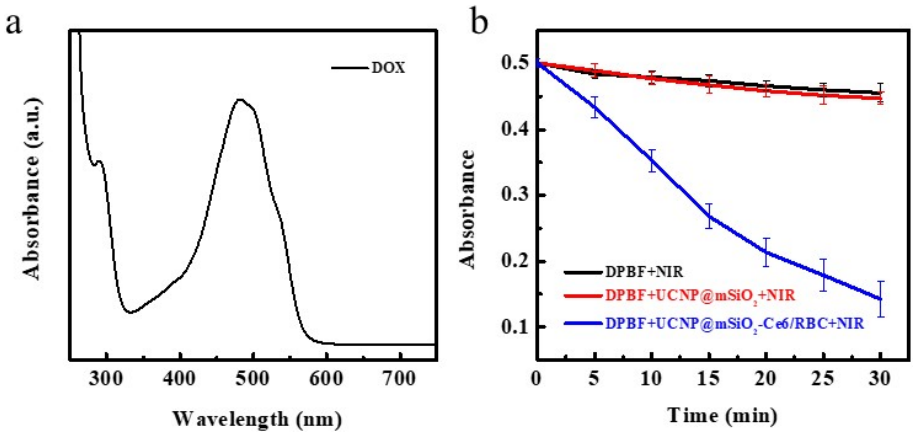

Fig. S1. (a) UV–Vis spectrum of DOX and (b) the absorbance of DPBF under different experimental conditions as a function of time.

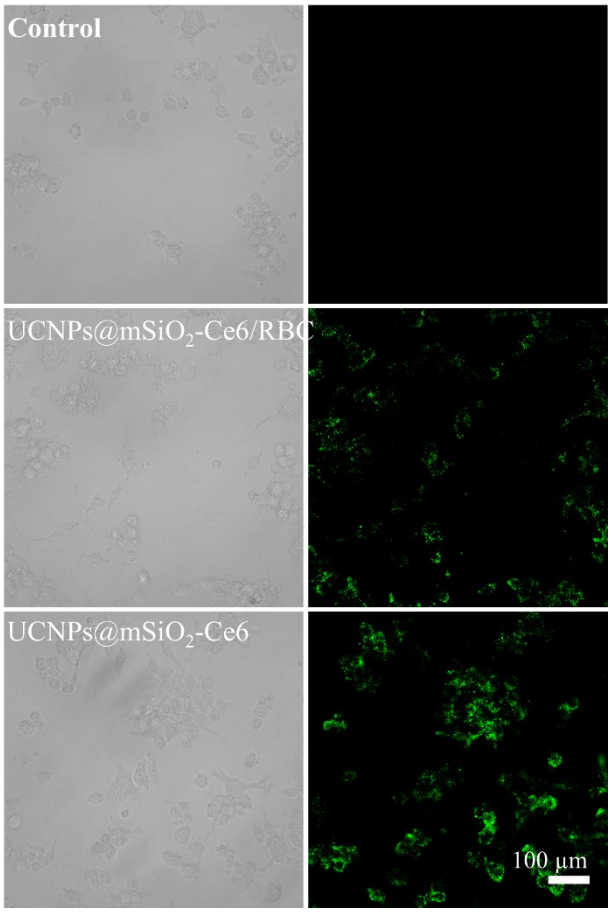

Fig. S2. CLSM images of RAW264.7 cells cultured with UCNPs@$mSiO_2$-Ce6 and UCNPs@$mSiO_2$-Ce6 RBC NPs.

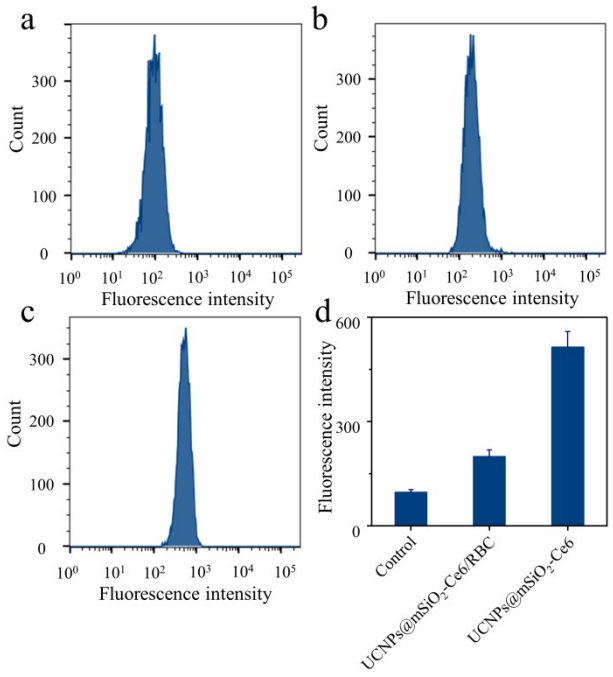

Fig. S3. Quantitative analysis of RAW264.7 cells by flow cytometry: (a) control, (b) UCNPs@mSiO$_2$-Ce6, (c) UCNPs@mSiO$_2$-Ce6 RBC NPs, and correspondingly (d) mean fluorescence intensity.

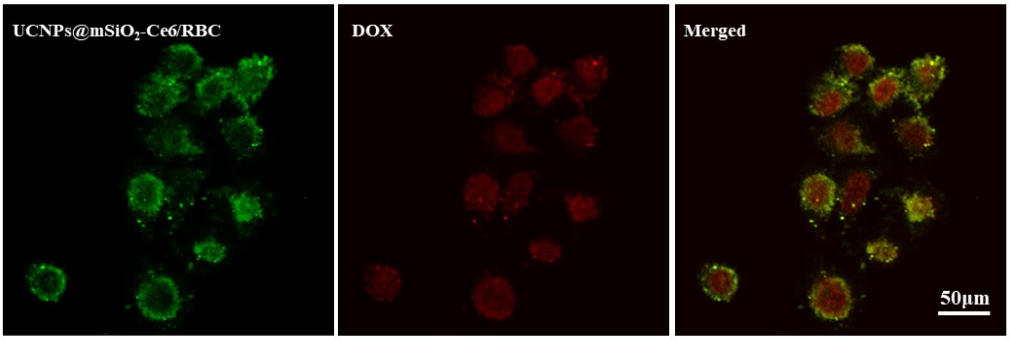

Fig. S4. Uptakes of DOX/UCNPs@mSiO$_2$-Ce6/RBC NPs by HepG2 cells.

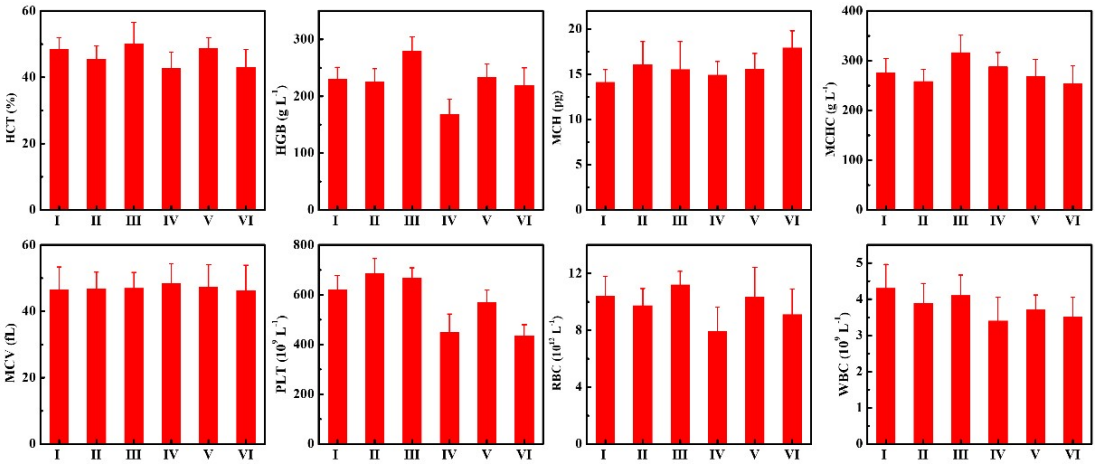

Fig. S5. The blood hematology analysis (n=6): (I) Control, (II) NIR, (III) UCNPs@mSiO$_2$-Ce6/RBC, (IV) DOX/UCNPs@mSiO$_2$-Ce6/RBC, (V) UCNPs@mSiO$_2$-Ce6/RBC+NIR, (VI) DOX/UCNPs@mSiO$_2$-Ce6/RBC+NIR.

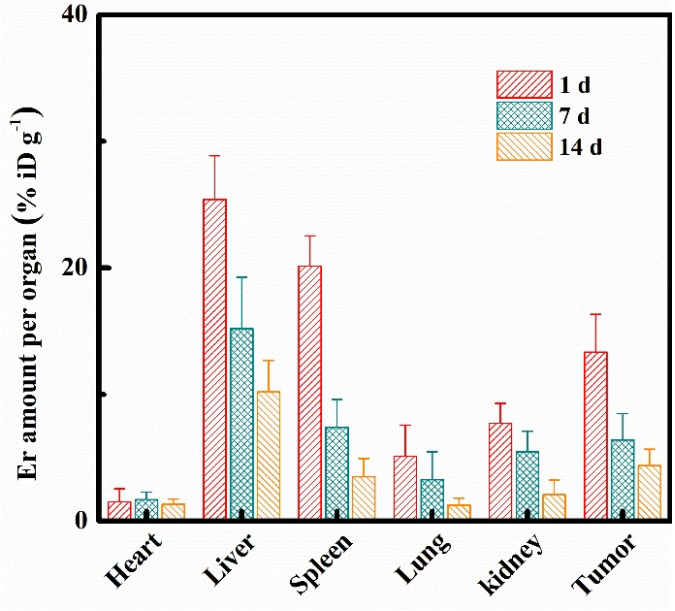

Fig. S6. Biodistribution of UCNPs@mSiO$_2$-Ce6/RBC NPs in main organs and tumors of mice after intravenous injection at different time points.

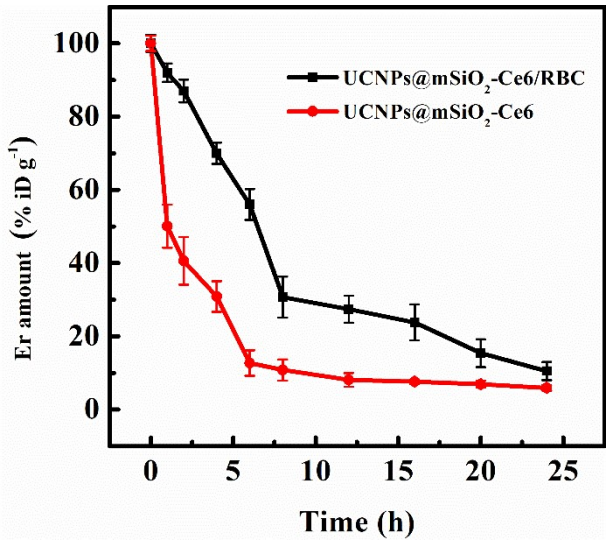

Fig. S7. The erbium content of UCNPs@mSiO$_2$-Ce6/RBC NPs or UCNPs@mSiO$_2$-Ce6 NPs in the blood of mice after intravenous injection at different time points.