Supporting Information

Near-infrared organic dye-based nano-agent for the photothermal therapy of cancer

Bingjiang Zhou, [†] Yunzheng Li, [†] *Guangle Niu ,* [‡] *Minhuan Lan,* [§] *Qingyan Jia,* [‡] *Qionglin Liang* [†]*

***Corresponding Author:** liangql@tsinghua.edu.cn

[†] Key Laboratory of Bioorganic Phosphorus Chemistry and Chemical Biology (Ministry of Education), Department of Chemistry, Tsinghua University, Beijing 100084, China

[‡] Key Laboratory of Photochemical Conversion and Optoelectronic Materials and City U-CAS Joint Laboratory of Functional Materials and Devices, Technical Institute of Physics and Chemistry, Chinese Academy of Sciences Beijing 100190, China

[§]Center Of Super-Diamond and Advanced Films and Department of Physics and Materials Science, City University of Hong Kong, Hong Kong SAR, China

1. *Characterization of **RC***

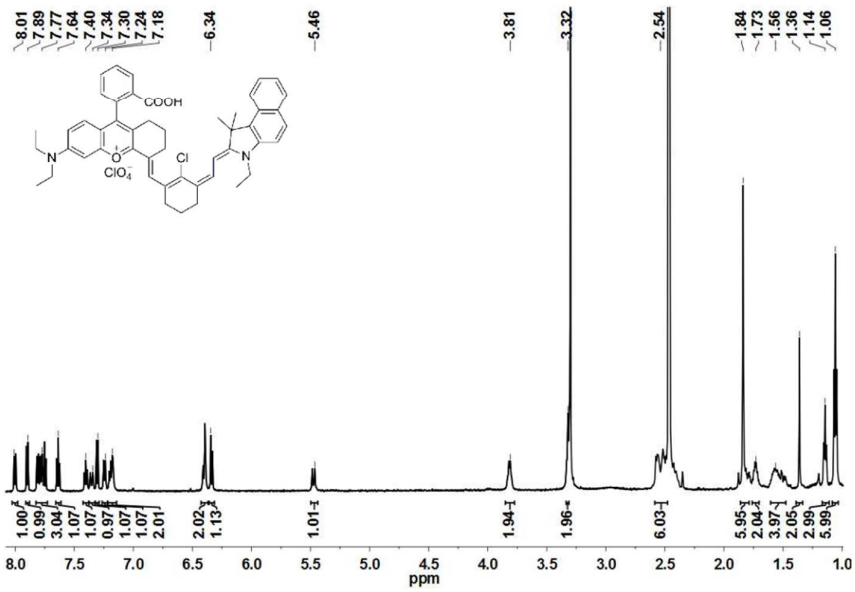


Fig.S1 The ^{1}HNMR spectra of **RC**

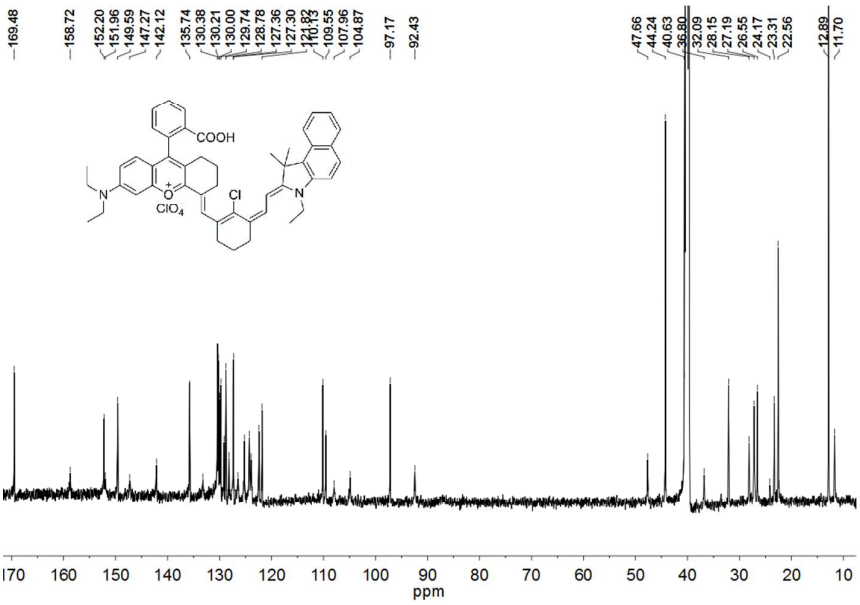
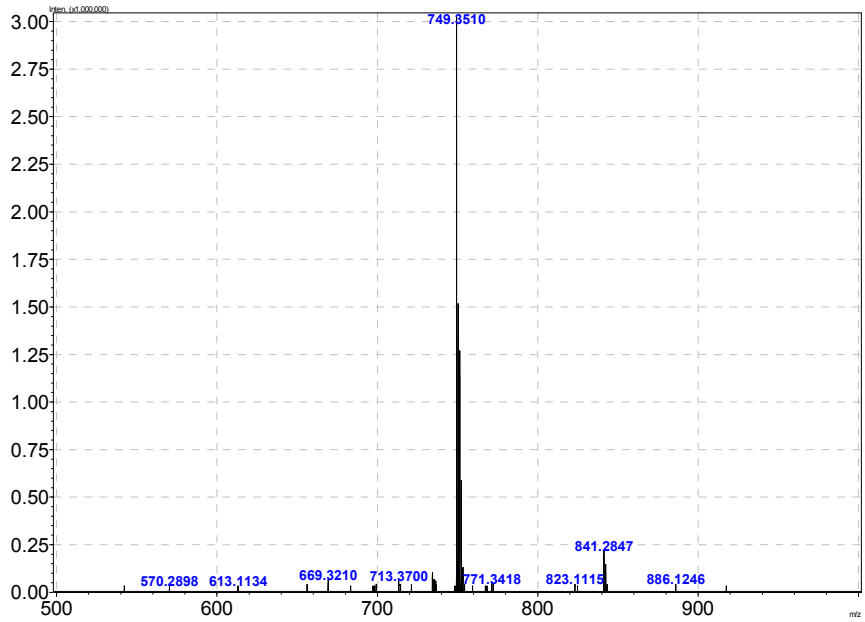


Fig.S2 The ^{13}CNMR spectra of **RC**



Formula: C49H50ClN2O3

ESI-HRMS m/z calcd：749.3510, found: 749.3510

Fig.S3 ESI-HRMS of **RC**

Fig.S4 The picture of **RC**-BSA NPs concentrated aqueous after crosslinking using a 100 kDa filter at 6000 rmp for 20 min with a nearly colorless filtrate

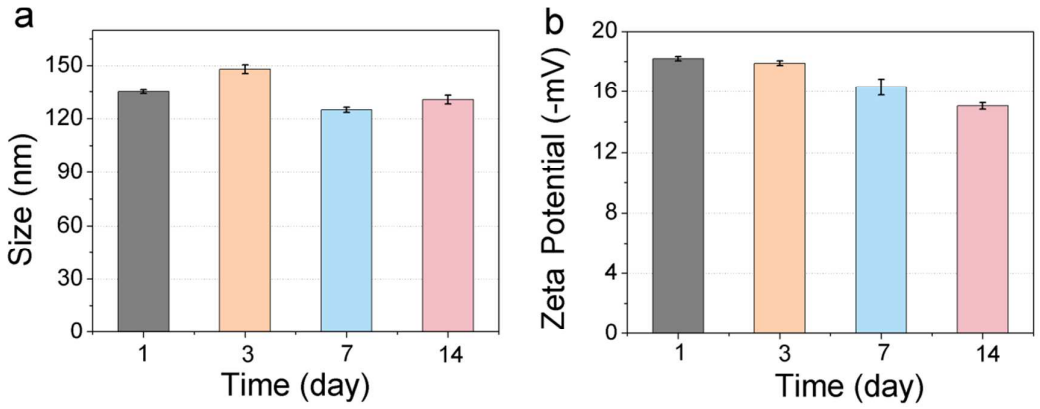


Fig.S5 The stability of particles' size(a) and zeta potentials(b) in 10% FBS in 14 days

2. *In vivo toxicology study*

Five healthy Balb/c mice were used as the untreated control. Other fifteen healthy Balb/c were injected with 75 μL 0.25 mM **RC**-BSA NPs. Mice were sacrificed to collect the blood (0.8 mL) for serum assay at 1 day, 7days, and 14 days post injection of NPs (five mice per group). The serum assay data was measured in Tsinghua hospital.

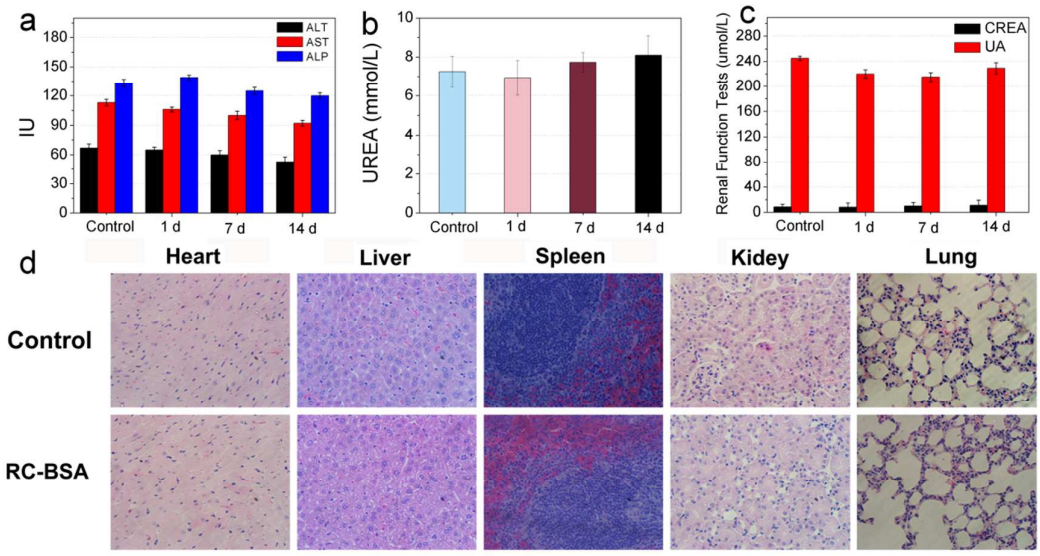


Fig.S6 Serum biochemistry data and in vivo toxicology study. (a) liver function markers. Renal function tests of (b) UREA, (c) CREA and UA.(d) H&E-stained imgaes of major organs.