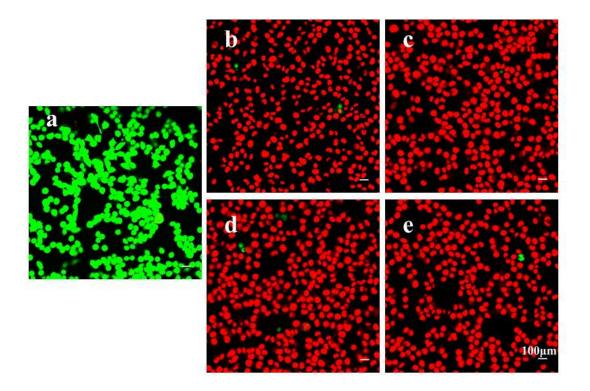
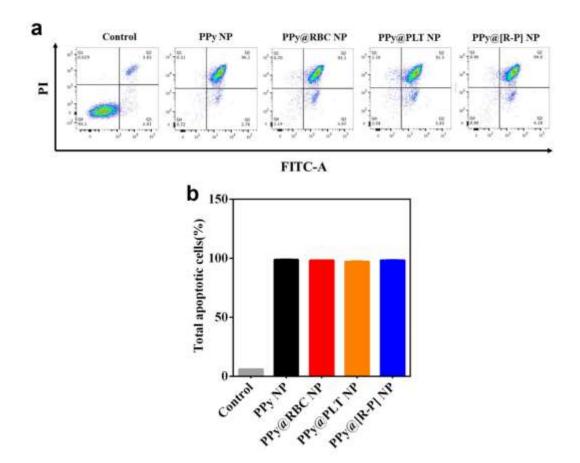
## **Supporting Information**

Erythrocyte-Platelet Hybrid Membranes Coating Polypyrrol Nanoparticles for Enhanced Delivery and Photothermal Therapy

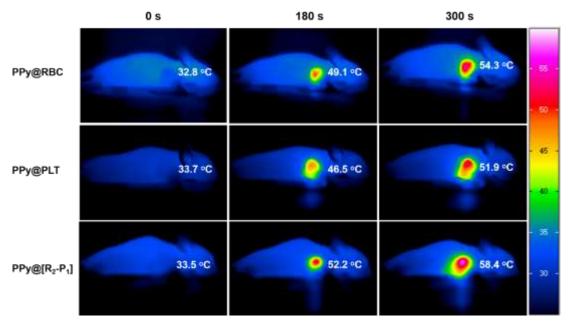
Yao Liu, Xuejun Wang, Boshu Ouyang, Xianping Liu, Yang Du, Xuzheng Cai, Huishu Guo,\* Zhiqing Pang,\* Wuli Yang and Shun Shen\*



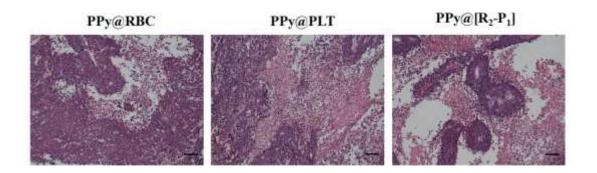
**Fig. S1.** CLSM images of HCT116 cells stained by PI and Calcein-AM after incubation with (a) PBS solution, 40  $\mu$ g/mL of (b) PPy NPs, (c) PPy@RBC NPs, (d) PPy@PLT NPs and (e) PPy@[R-P] NPs by NIR laser irradiation (808 nm, 1.5 W/cm², 180 s). Scale bar =100  $\mu$ m.



**Fig. S2.** (a) The images of flow cytometry through Annexin-V-FITC/PI co-staining method. The HCT116 cells treated with PPy NPs, PPy@RBC NPs, PPy@PLT NPs and PPy@[R-P] NPs at a concentration of 40 μg/mL by NIR lighting under a power density of 1.5 W/cm<sup>2</sup> for 180 s, respectively. (b) Percentages of total apoptotic cells calculated according to the results of flow cytometry.



**Fig. S3.** Infrared thermal images of PPy@RBC NPs, PPy@PLT NPs and PPy@[ $R_2$ - $P_1$ ] NPs NPs intravenously injected under the second NIR laser irradiation after 6 hrs at a power density of 1.50 W/cm<sup>2</sup> for 300 s.



**Fig. S4.** Histological analysis of H&E staining of tumors after treatment by PPy@RBC NPs, PPy@PLT NPs and PPy@[R<sub>2</sub>-P<sub>1</sub>] NPs with NIR laser irradiation.

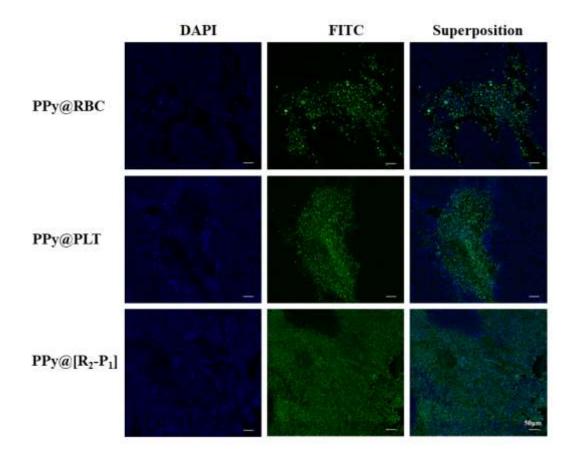
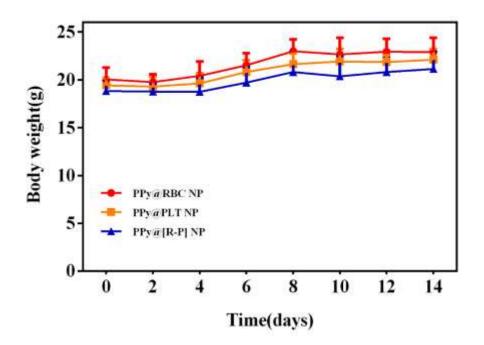
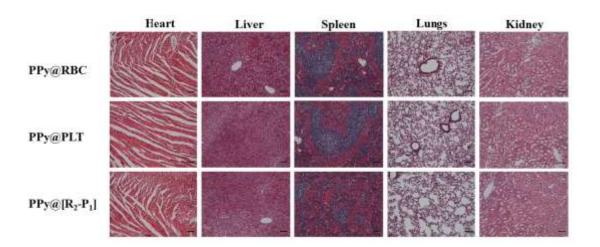


Fig. S5. TUNEL sections of tumors after treatment by PPy@RBC NPs, PPy@PLT NPs and PPy@[R2-P1] NPs with NIR laser irradiation. Bar =50  $\mu$ m.



**Fig. S6.** Body weight changes after treatment by PPy@RBC NPs, PPy@PLT NPs and PPy@[R<sub>2</sub>-P<sub>1</sub>] NPs with NIR laser irradiation.



**Fig. S7.** Histological analysis of H&E staining of main organic tissues after PTT by PPy@RBC NPs, PPy@PLT NPs and PPy@[ $R_2$ - $P_1$ ] NPs. Bar=200  $\mu$ m.

.