

Supplementary Materials

Ultra-small NIR-Responsive Nanotheranostic Agent for Targeted Photothermal Ablation Induced Damage-Associated Molecular Patterns (DAMPs) from Post-PTT of Tumor Cells Activate Immunogenic Cell Death

Shankar Sobhana^{1¶}, Namratha Partha Sarathy^{1¶}, Laxmanan Karthikeyan^{1¶}, Krishnamurthy Shanthi² Raju Vivek^{1*}

¹Bio-Nano Therapeutics Research Laboratory, Cancer Research Program (CRP), Department of Zoology, Bharathiar University, Coimbatore-641 046, TN, India.

²Department of Biochemistry, Prof. Dhanapalan College of Science and Management, Chennai, India.

¶These authors contributed equally to this work

Corresponding author: Raju Vivek: vivekr@buc.edu.in. Bio-Nano Therapeutics Research Laboratory, Cancer Research Program (CRP), Department of Zoology, Bharathiar University, Coimbatore-641 046, TN, India.

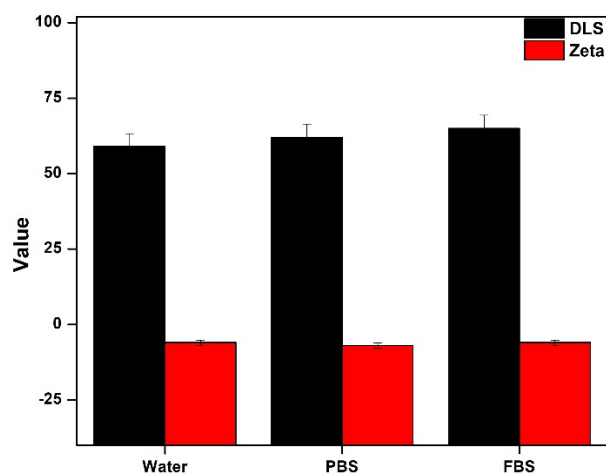


Figure S1: DLS and zeta potential of the NC in various biological medium.

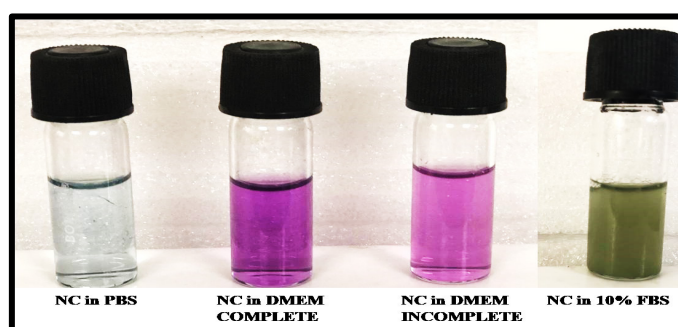


Figure S2: Stability of NC in various biological medium.

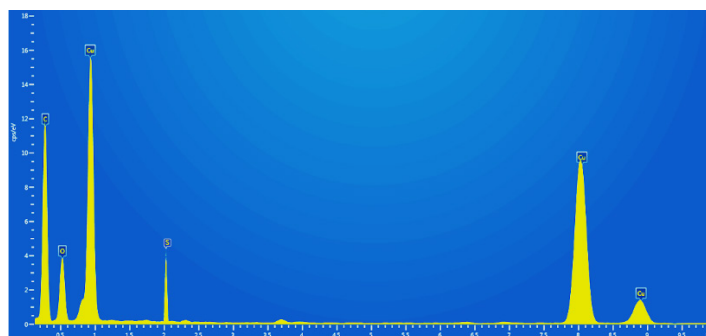


Figure S3: EDX elemental analysis of the NC for the confirmation of Cu and S.

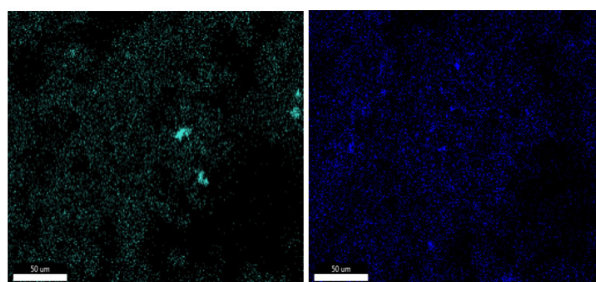


Figure S4: Corresponding elemental mapping of Cu, and S in the NC.

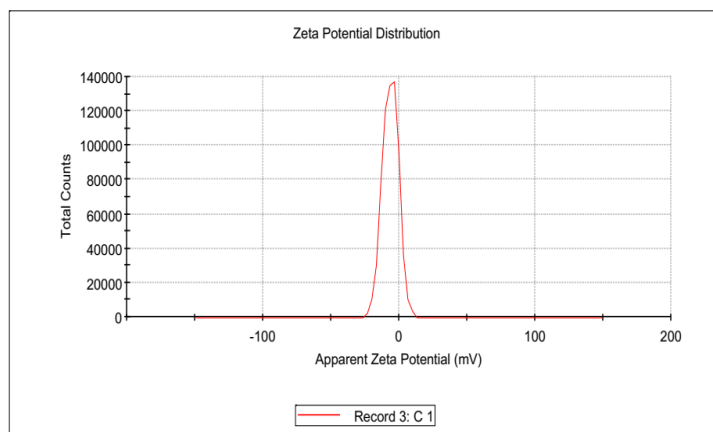


Figure S5: Zeta potential of the NC for the surface charge analysis.

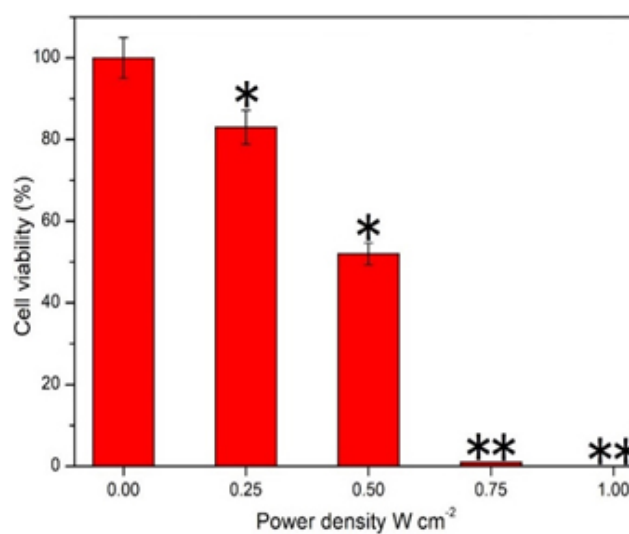


Figure S6: Cell viability of NC treatment under 808 nm NIR light with various density.

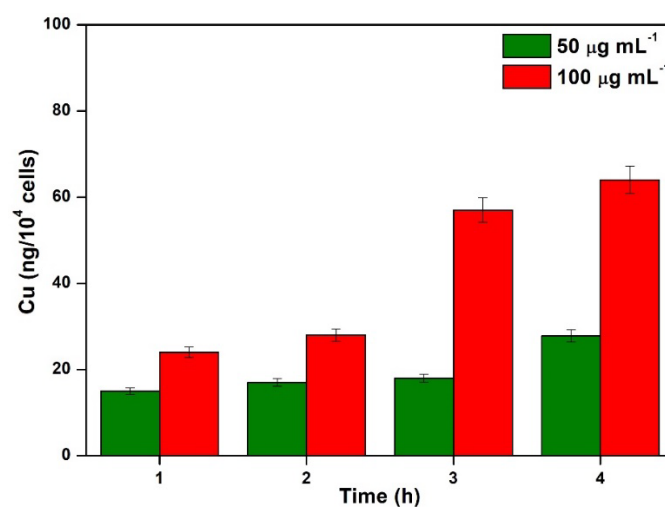


Figure S7: Quantitative in vitro cellular uptake study of the NC analyzed by inductively coupled plasma mass spectrometry (ICP-MS) measurement.

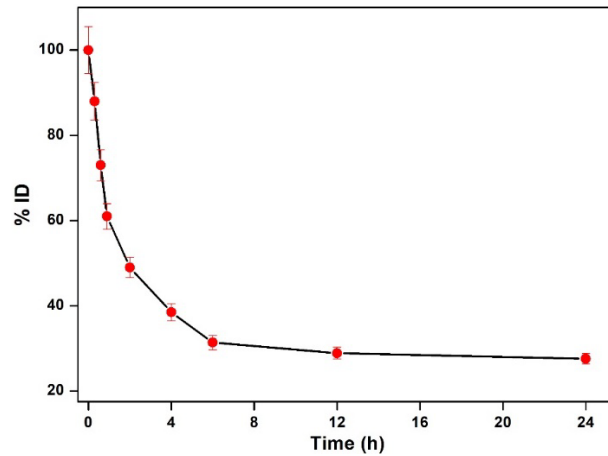


Figure S8: Blood circulation profile of NC in various time points.

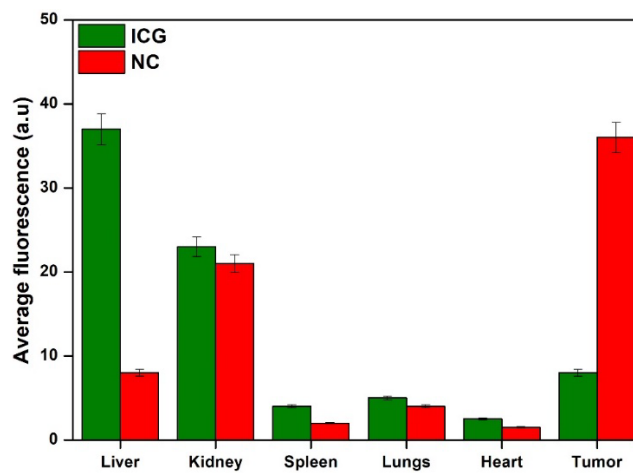


Figure S9: Biodistribution of free ICG and NC in mice determined by the ICG FL from diluted tissue lysates. The data are shown as mean±SD (n=3).

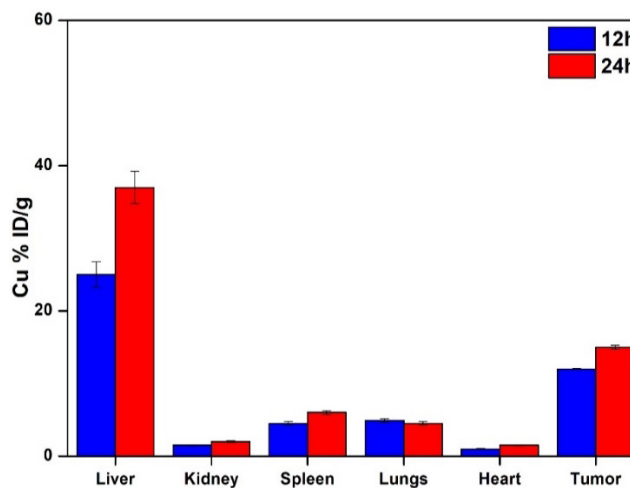


Figure S10: After being treated with NC for various time, the biological distribution of Cu accumulation in each organ: liver, kidney, spleen, lungs, heart, and tumor. The data are represented as mean ± SD, n=6 mice per group. Data are mean ± SD.