## β-Glycosidase Sensitive Oral Nanoparticles for Combined Photothermal and Chemo Treatment of Colorectal Cancer

Jingning Zhou<sup>a,1</sup>, Zequn Zhuang<sup>a,1</sup>, Rui Gao<sup>b</sup>, Ran Li<sup>c</sup>, Yigang Chen<sup>a,\*</sup>

<sup>a</sup> Department of General Surgery, The Affiliated Wuxi No. 2 People's Hospital of Nanjing Medical University, Wuxi, 214002, Jiangsu, China

<sup>b</sup> School of Pharmacy, China Pharmaceutical University, Nanjing, 211100, Jiangsu, China

<sup>c</sup> School of Pharmacy, Jiangsu University, Zhenjiang, 212013, Jiangsu, China

<sup>1</sup>These authors contributed equally to this work and should be considered co-first authors.

\*Correspondence: Yigang Chen, E-mail: 9862023226@jiangnan.edu.cn

Address: Department of General Surgery, The Affiliated Wuxi No. 2 People's Hospital of Nanjing Medical University, 68 Zhongshan Road, Wuxi 214002, Jiangsu, China

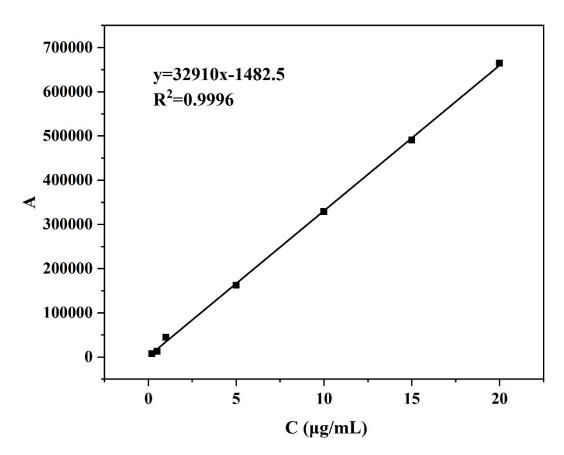


Fig. S1 Standard HPLC curve of 5-FU.

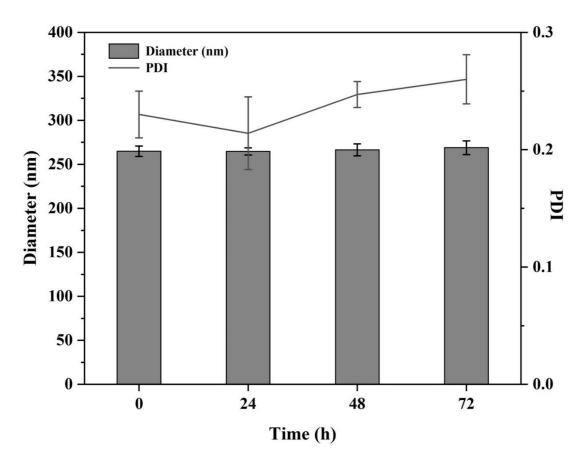


Figure. S2 Particle size and PDI value of BiNS@RHL-CS NPs within 72 h.

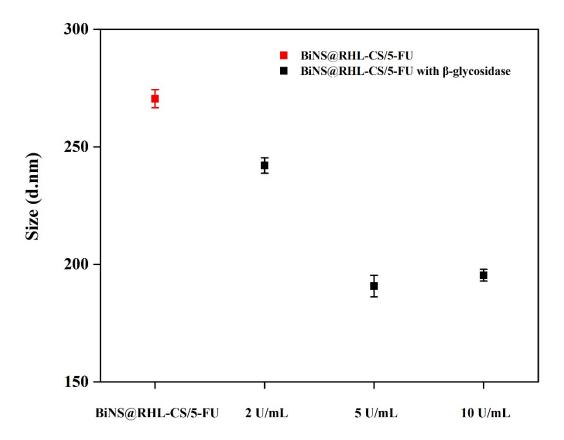


Fig. S3 The changes in particle size of BiNS@RHL-CS/5-FU NPs treated with different concentrations of  $\beta$ -glycosidase, n=3.

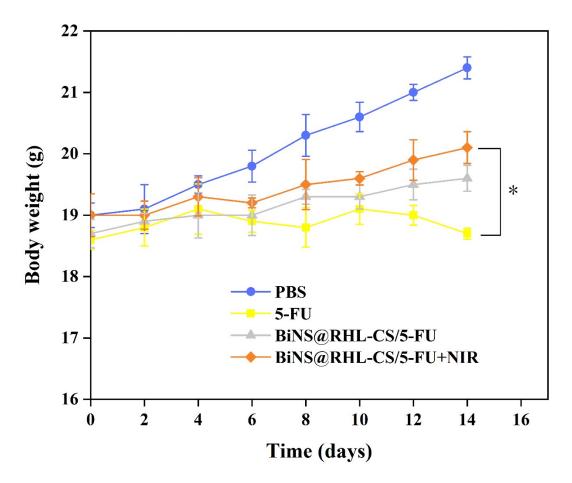


Fig. S4 Weight change curve of mice within 14 days, n=5, \*p<0.05

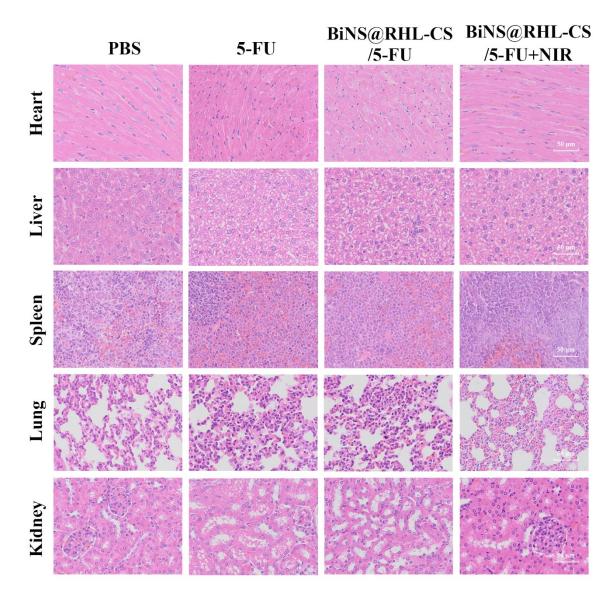


Fig. S5 H&E staining of heart, liver, spleen, lung and kidney dissected at the end of the treatment. Scale bar was 50µm.