

## Electronic Supplementary Information

### Multifunctional Nanoplatfrom for Precision-Guided Therapeutic Intervention in Bacterial Infection

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### 1. Standard curve of HC.

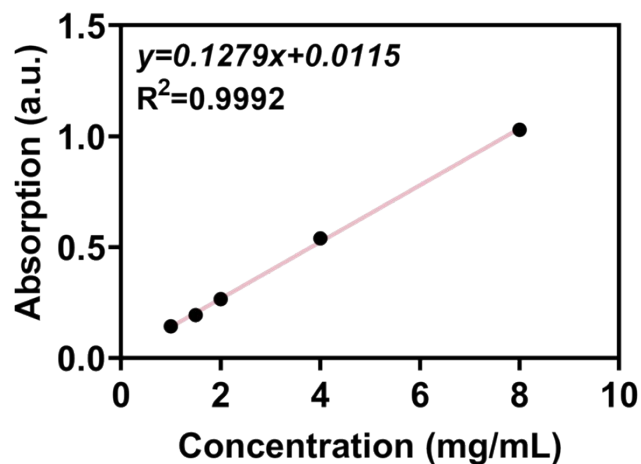


Fig. S1 Standard curve of HC concentration in aqueous solution for UV-absorption at 427 nm.

### 2. NMR spectra of HC.

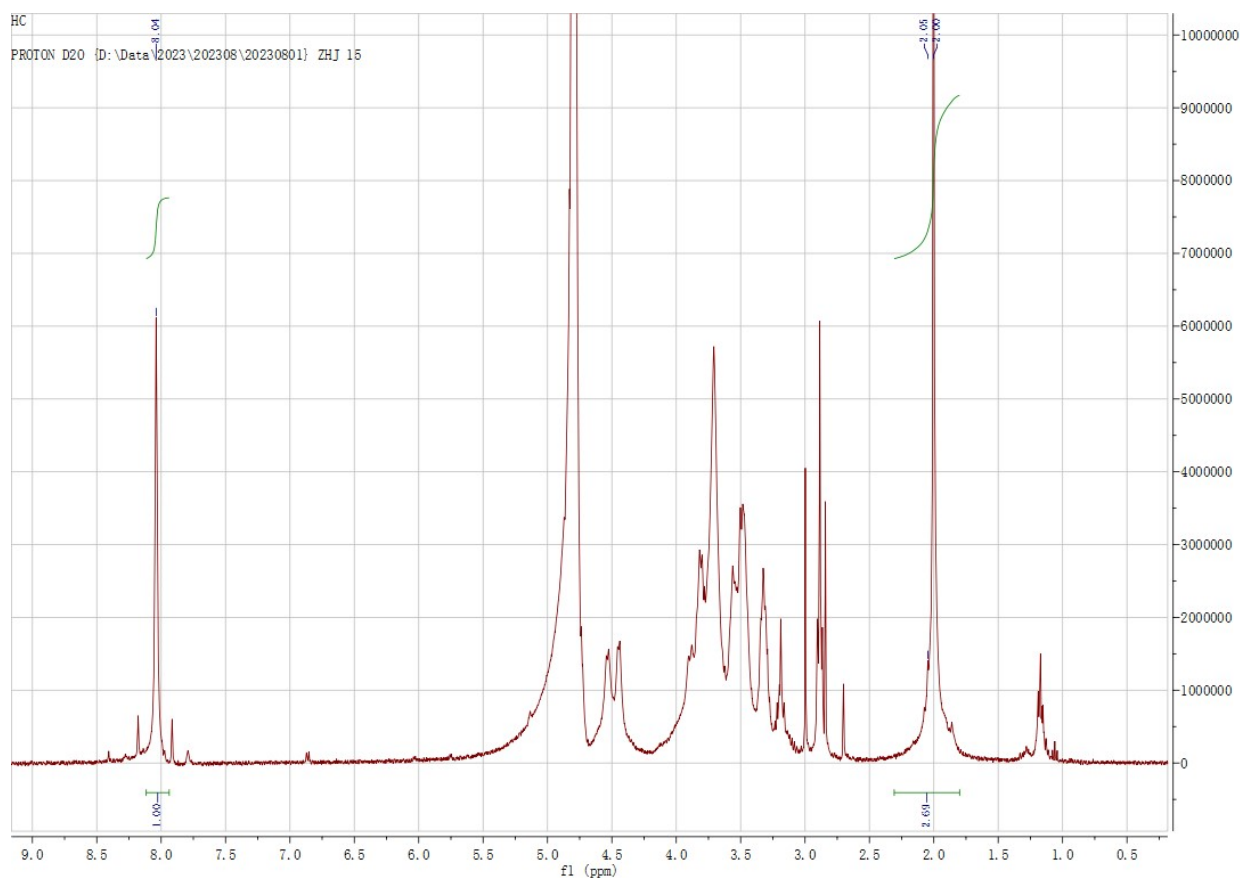
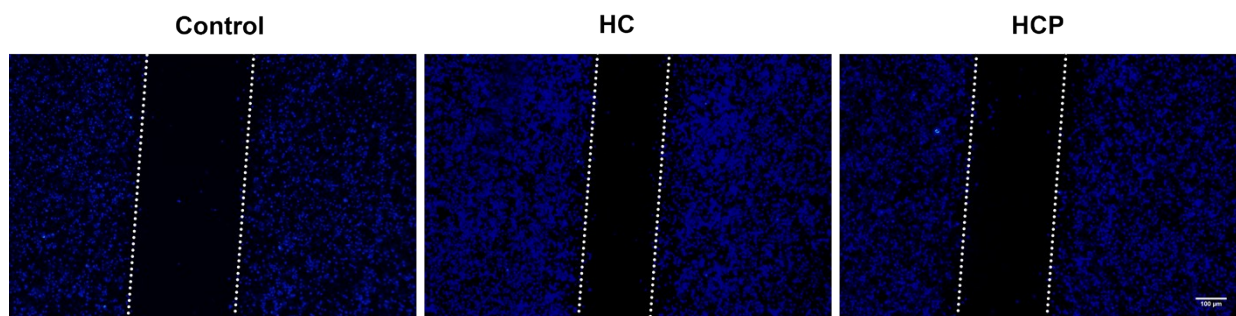


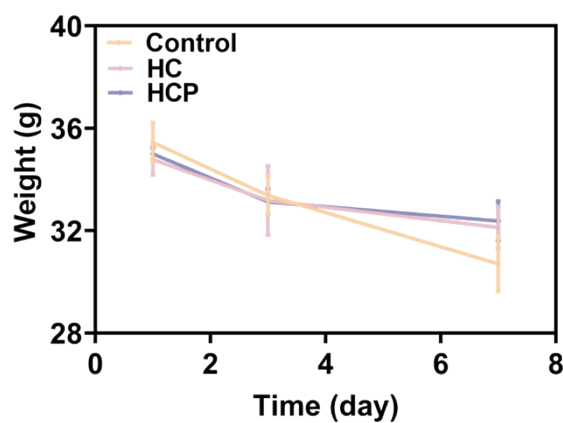
Fig. S2 <sup>1</sup>H NMR of HC in D<sub>2</sub>O.

### 3. Results of different treatments on the migration ability of L929 cells.



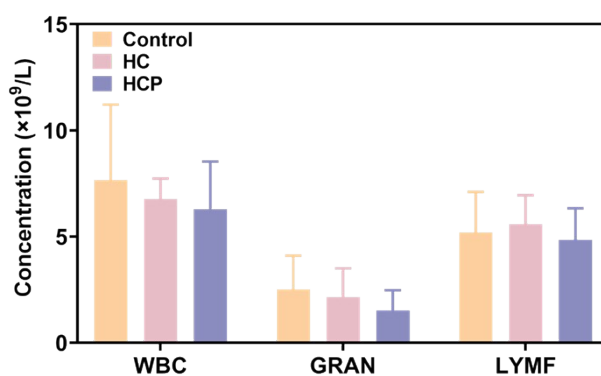
**Fig. S3** Results of Control, HC and HCP on the migration ability of L929 cells on 48 h. Scale bar: 100  $\mu\text{m}$ .

#### 4. Bodyweight change of mice.



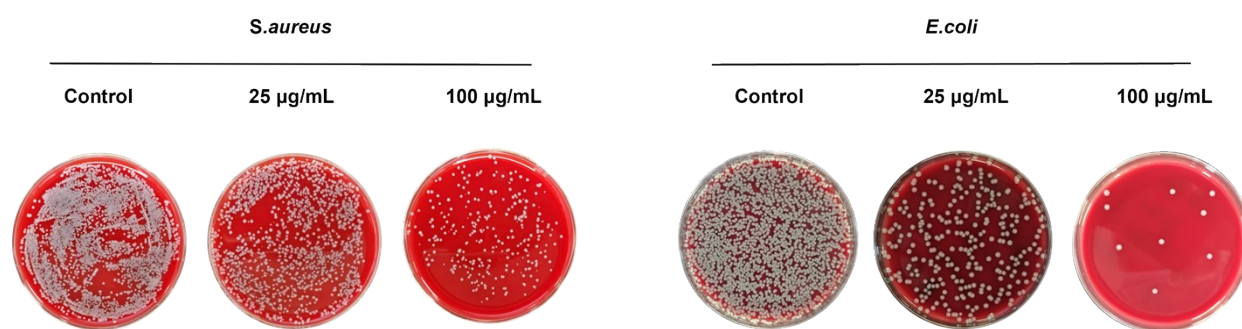
**Fig. S4** Bodyweight change of mice with different treatments during 7 days (n=6). The significant difference was calculated via a one-way ANOVA analysis.

#### 5. Hematological analysis of mice by various treatments.



**Fig. S5** Hematological analysis of mice by various treatments. The significant difference was calculated via a one-way ANOVA analysis.

## 6. Standard Plate Counting Assays.



**Fig. S6.** Photos of *S. aureus* and *E. coli* colonies under different concentrations of PLL.