

Supplementary information

Injectable photothermally active antibacterial composite hydroxypropyl chitin hydrogel for promoting wound healing process through photobiomodulation

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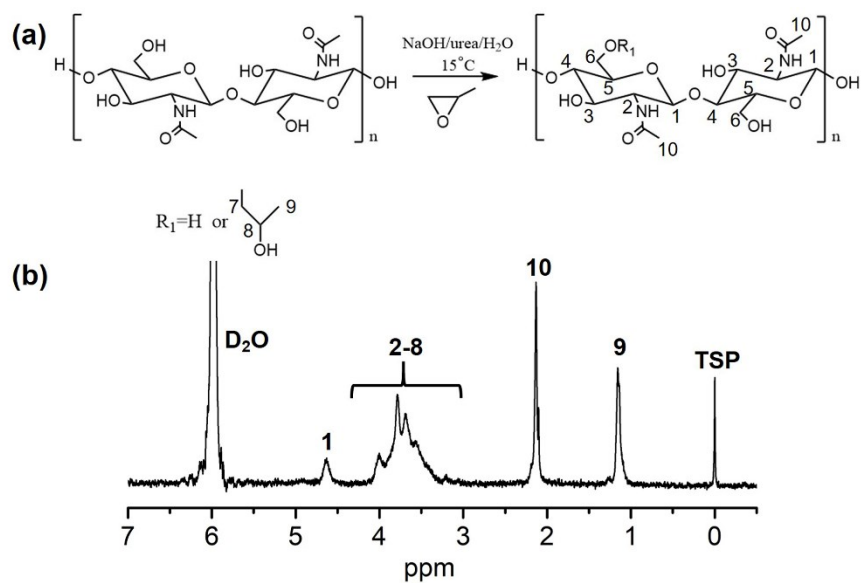


Fig. S1. Schematic illustration of the synthesis (a) and ¹H NMR spectrum in 10% DCl/D₂O (b) for HPCH.

Table S1. Composition of the HPCH/TA/Fe Hydrogels.

Code	HPCH concentration (wt%)	TA concentration (wt%)	FeCl ₃ ·6H ₂ O concentration (wt%)	Molar ratio of FeCl ₃ ·6H ₂ O/T A
2%-0.1%-0	2	0.1	0	0
2%-0.1%-1.67	2	0.1	0.027	1.67
2%-0.1%-3.33	2	0.1	0.053	3.33
2%-0.1%-6.67	2	0.1	0.106	6.67
2%-0.1%-13.33	2	0.1	0.216	13.33
2%-0.1%-20.00	2	0.1	0.324	20.00
2%-0.2%-16.67	2	0.2	0.053	1.67

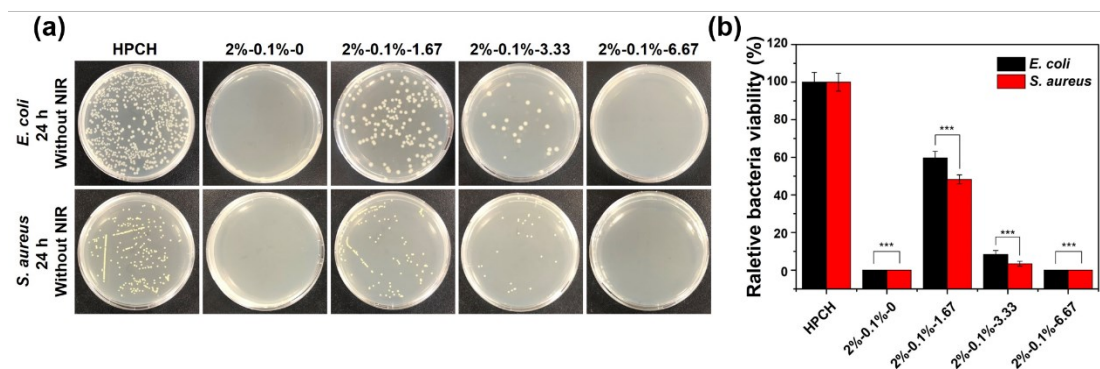


Figure S2. Photographs of formed bacterial colonies (a) and relative bacterial viability (b) of *E. coli* and *S. aureus* cells after coculture with different hydrogels for 24 h without the 808 nm NIR laser irradiation. Data are presented as mean $\pm$ SD, $n=3$, *** $p < 0.001$.