Supporting Information

Facile synthesis of hydroxypropyl chitosan-egg white hydrogel dressing with antibacterial and antioxidative activities for accelerating burn wound healing

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Table S1 RT-PCR primer sequences of GAPDH, TNF-α, IL-1β, IL-1α, IL-4

Primer		Sequence (5'-3')	Species
TNF-α	FORWARD	CAGAAAGCATGATCCGCGAC	Mice
	REVERSE	TTGAGAAGATGATCTGAGTGTGAG	
IL-1β	FORWARD	ATGGGCTGGACTGTTTCTAATG	Mice
	REVERSE	CTTGTGACCCTGAGCGACC	

GAPDH	FORWARD	GGTTGTCTCCTGCGACTTCA	Mice
	REVERSE	TGGTCCAGGGTTTCTTACTCC	
TNF-α	FORWARD	CCAGGTTCTCTTCAAGGGACAA	Rats
	REVERSE	GGTATGAAATGGCAAATCGGCT	
IL-1α	FORWARD	GCTAAGTTTCAATCAGCCCTTTAC	Rats
	REVERSE	CATGATGAACTCCTGCTTGACG	
IL-1β	FORWARD	TGTTTCCCTCCCTGCCTCTGAC	Rats
	REVERSE	CGACAATGCTGCCTCGTGACC	
IL-4	FORWARD	AGAAGCTGCACCGTGAATGAGT	Rats
	REVERSE	GTATTTCCCTCGTAGGATGCTTT	
GAPDH	FORWARD	CTGGAGAAACCTGCCAAGTATG	Rats
	REVERSE	GGTGGAAGAATGGGAGTTGCT	

Figure S1

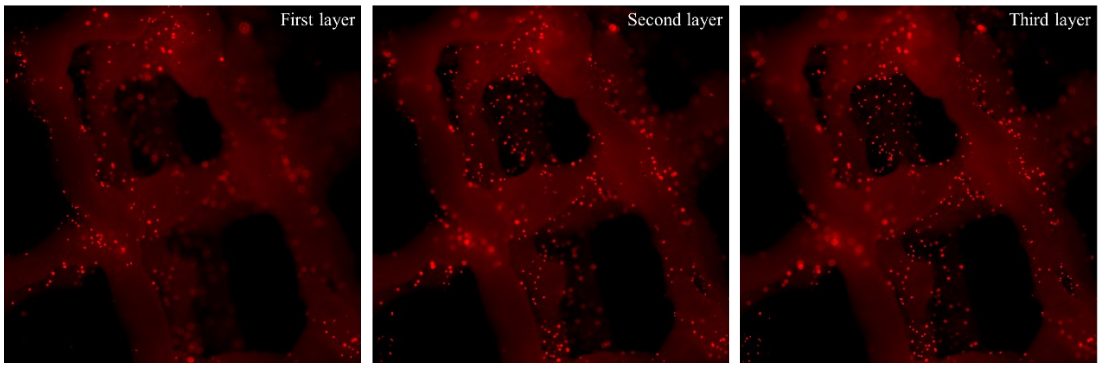

Figure S1. The cells adhered to different layers of HPCS-EWH scaffold to achieve directional growth in longitudinal space.

Figure S2

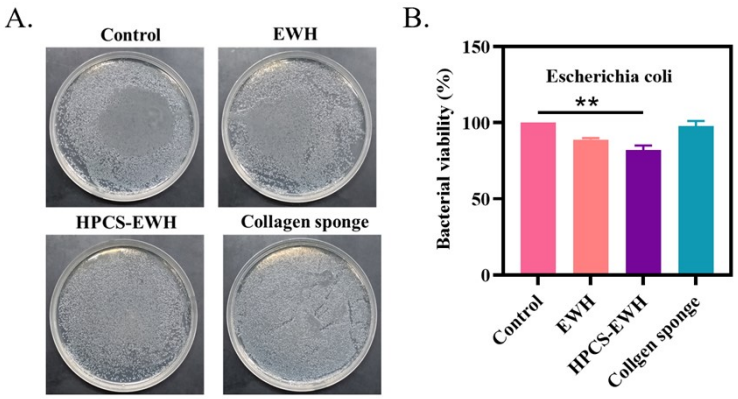

Figure S2. The anti-Escherichia coli property. A. Optical photographs of survival bacteria (Escherichia coli). B. The quantitative statistics of survival bacteria (Escherichia coli).

Figure S3

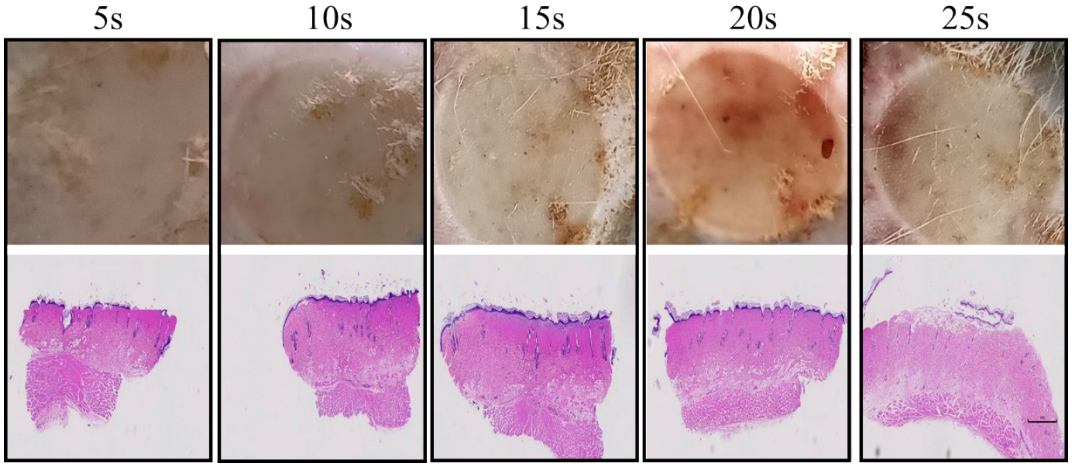

Figure S3. General observation and H&E staining of different burnt wound tissues (4X, Scale bar=1mm). 5s and 10s of burn time presented various degrees of superficial partial thickness burns, which affected the epidermis and superficial dermis. 15s of burn time, where thermal damages extended into the underlying deeper dermis, were classed as deep partial thickness burns. When burning time reached to 20s, burn damages extended through the full dermis, even to deeper tissues. 25s of the burn time, the skin structure collapsed by thermal injury.