

## **SUPPORTING INFORMATION for**

### **A Multifunctional Thermosensitive Hydrogel Based on Phototherapy for Promoting the Healing of Dental Extraction Wounds**

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#### **Author Contributions**

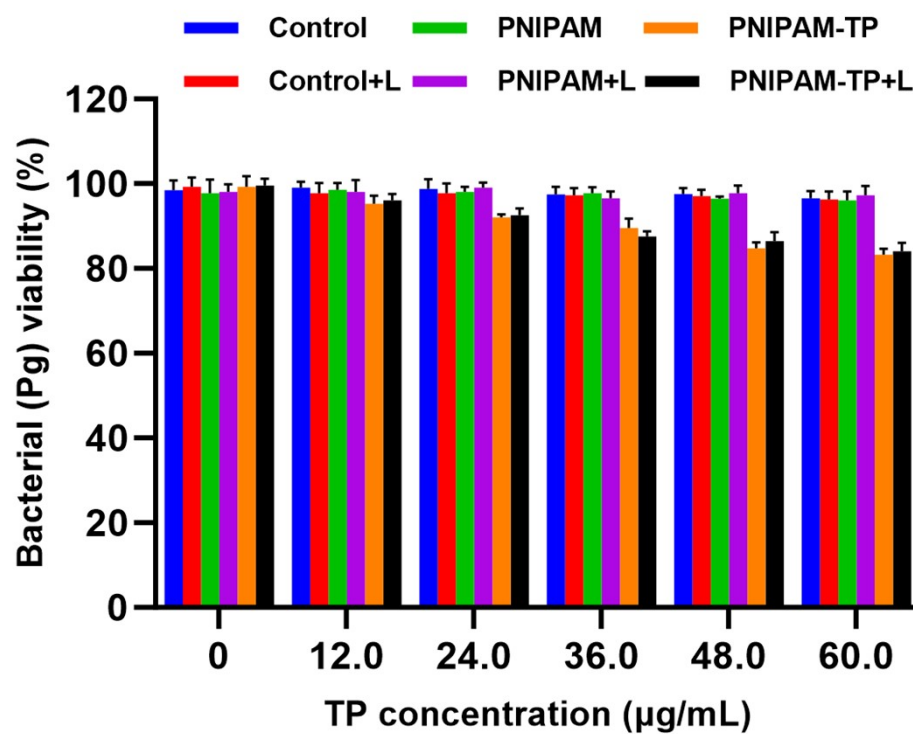
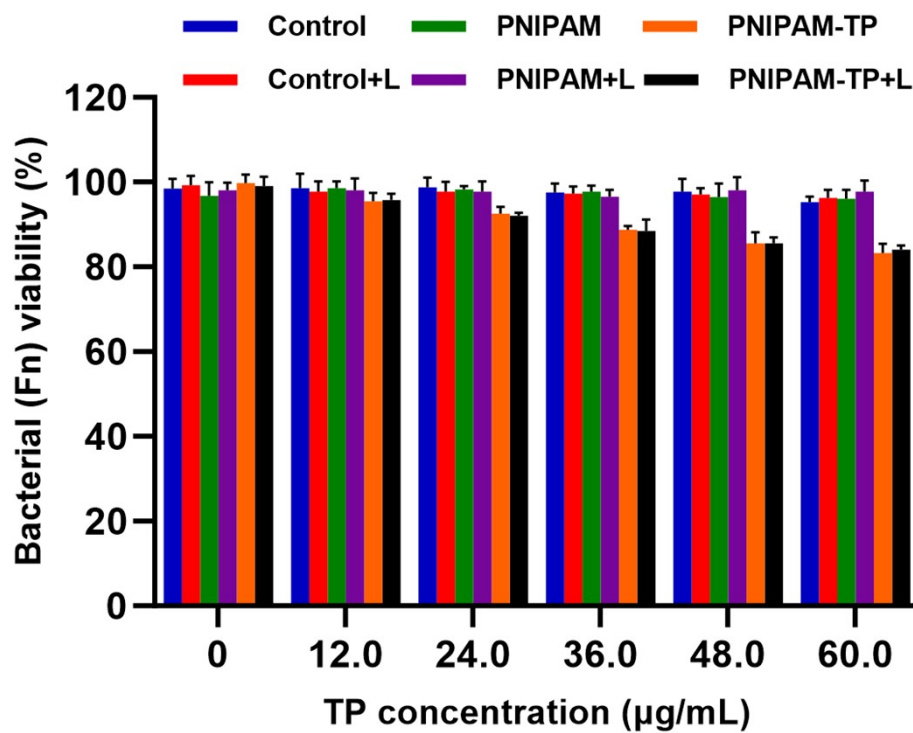
<sup>1</sup> S.S. and Y.C. contributed equally to this work.

#### **Conflicts of interest**

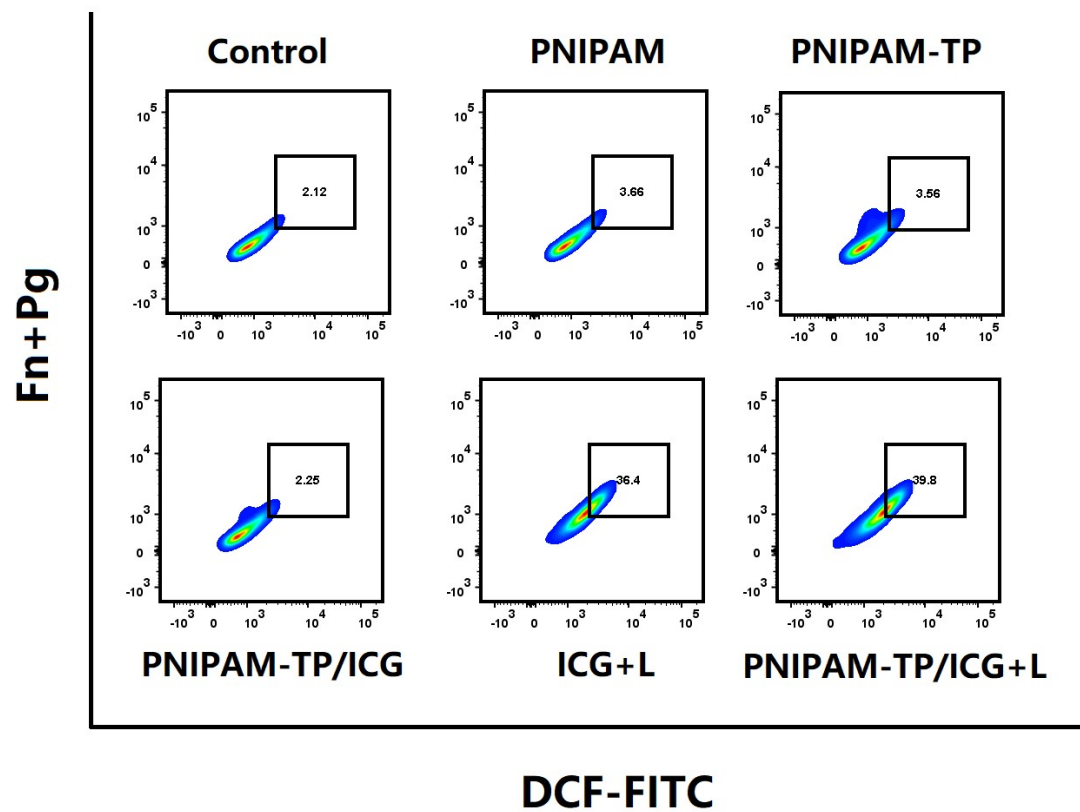
The authors declare no competing financial interest.

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**Fig. S1** Antibacterial effect against Pg and Fn of laser irradiation itself, PNIPAM hydrogel and PNIPAM-TP hydrogel in combination with laser irradiation.



**Fig. S2** Flow cytometry assay of intracellular ROS generation of Pg and Fn triggered by various treatments using DCFH-DA as a fluorescence probe.

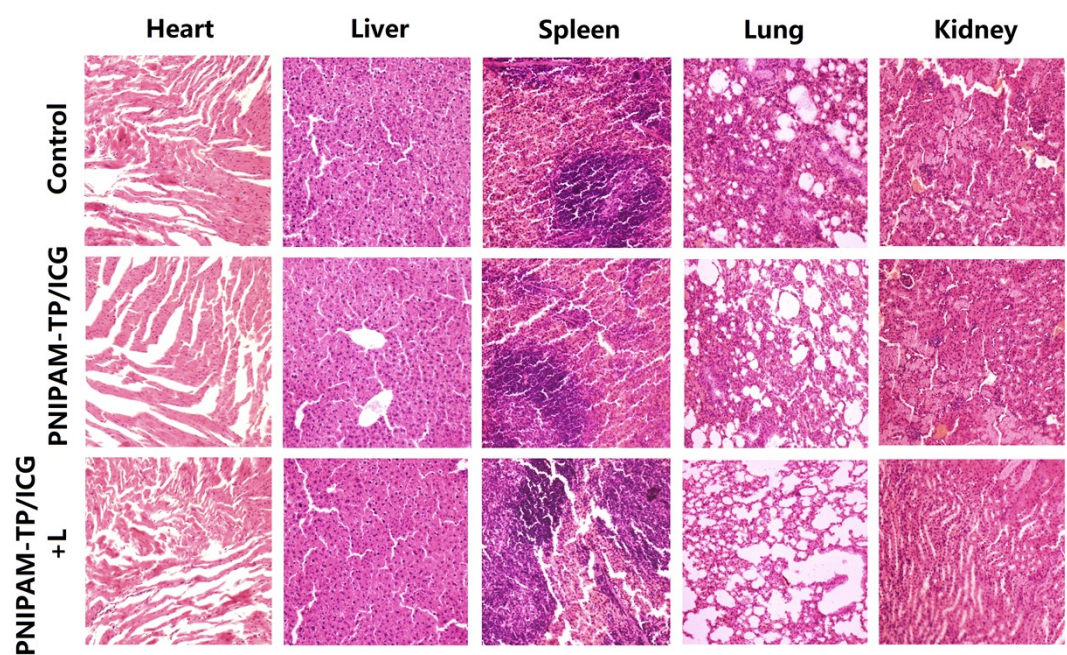
**Tab. S1 Blood routine and liver function parameters of rats**

Parameters	Control	PNIPAM-TP/ICG	PNIPAM-TP/ICG+L	Reference
WBC ( $10^9/L$ )	$5.0 \pm 0.7$	$6.4 \pm 0.5$	$5.5 \pm 0.5$	0.8-6.8
Lymph ( $10^9/L$ )	$3.5 \pm 0.5$	$3.7 \pm 0.8$	$4.8 \pm 0.4$	0.7-5.7
Mon ( $10^9/L$ )	$0.2 \pm 0.1$	$0.1 \pm 0.1$	$0.1 \pm 0.1$	0.0-0.3
Gran ( $10^9/L$ )	$1.7 \pm 0.3$	$2.2 \pm 0.3$	$2.0 \pm 0.3$	0.1-1.8
RBC ( $10^{12}/L$ )	$9.2 \pm 0.3$	$9.1 \pm 0.6$	$9.4 \pm 0.5$	6.4-9.4
HGB (g/L)	$113 \pm 5.7$	$126 \pm 4.8$	$121 \pm 6.0$	110-143
ALT (U/L)	$36.5 \pm 1.6$	$25.4 \pm 2.2$	$27.1 \pm 2.5$	21.5-61.8
AST (U/L)	$48.2 \pm 7.6$	$45.1 \pm 6.0$	$47.7 \pm 6.4$	41.6-195.7
ALP (U/L)	$126.6 \pm 8.1$	$137.5 \pm 6.8$	$141.5 \pm 8.6$	12.0-611.0

WBC: white blood cell; Lymph: Lymphocyt; Mon: Monocyte; Gran: Granulocytes;

RBC: Red blood cell; HGB: Hemoglobin; ALT: *alanine aminotransferase*; AST: *aspartate aminotransferase*; ALP: *alkaline phosphatase*. Data are expressed as mean

$\pm$  SD (n = 3).



**Fig. S3** Histopathological analysis of main organs (heart, liver, spleen, lung and kidney) stained with H&E after various treatments.