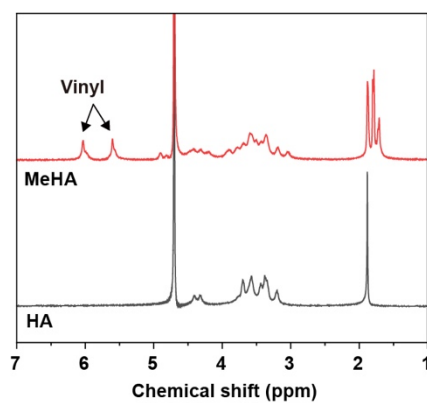


## **Photo-crosslinked Pro-angiogenic Hydrogel Dressing for Wound Healing**

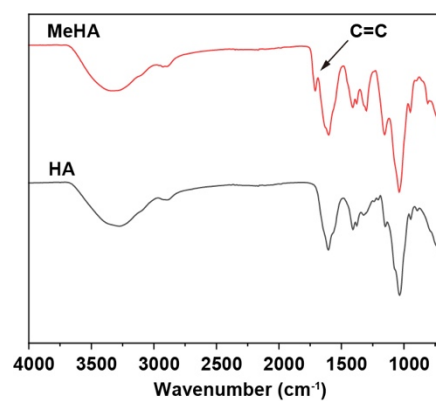
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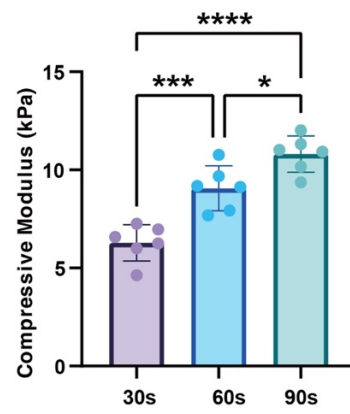
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fangp@shanghaitech.edu.cn (G.F.)



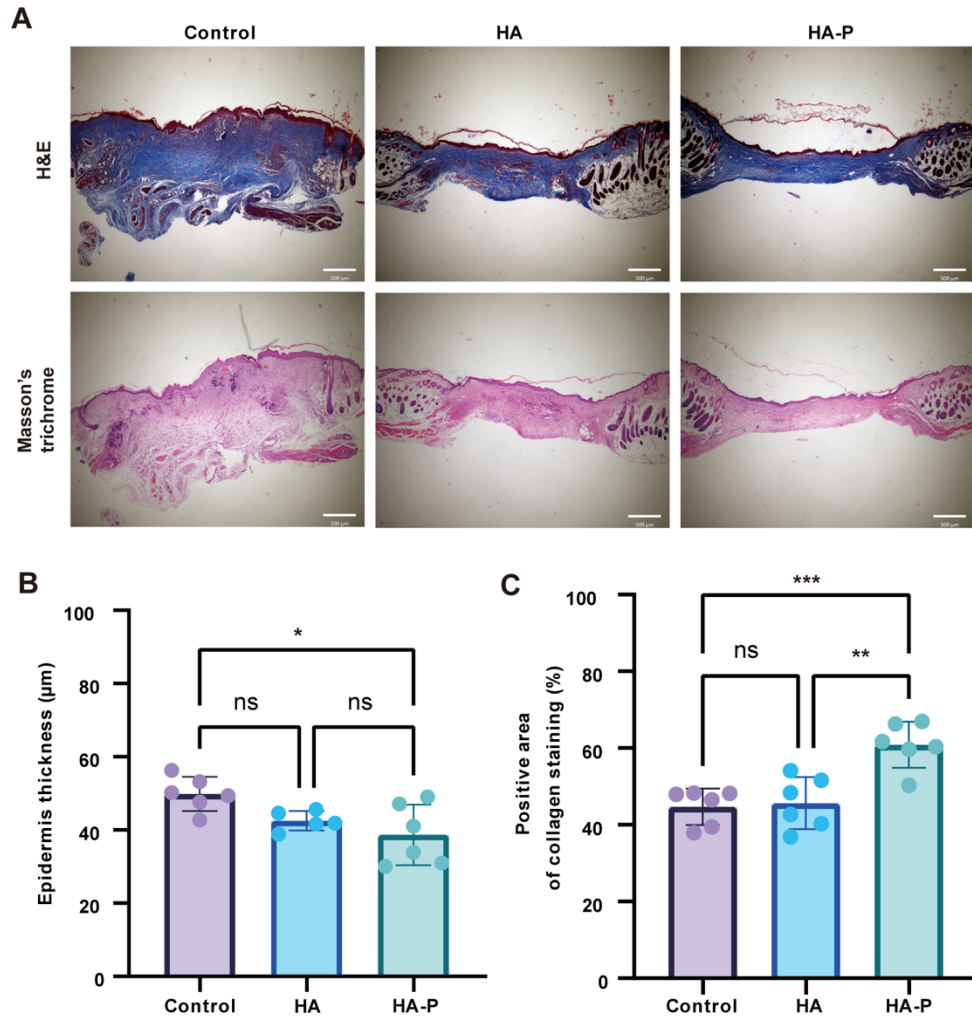
**Figure S1.** <sup>1</sup>H NMR spectra of methacrylated HA (MeHA) and HA polymers. The spectrum shows the vinyl group within the structure of MeHA at the chemical shifts between 6.4 and 5.8 ppm.



**Figure S2.** The FTIR spectra of methacrylated HA (MeHA) and HA polymers. The arrow labels the characterized “C=C” bond on the MeHA.



**Figure S3.** Compression test of HA hydrogels (0.5% w/v) with the 30 s, 60 s, and 90 s of UV exposure. (mean  $\pm$  SD,  $n = 6$ ,  $*p < 0.05$ ,  $***p < 0.001$ ,  $****p < 0.0001$ ).



**Figure S4.** HA-P hydrogel promoted re-epithelialization and collagen deposition in full-thickness excisional wounds. (A) Representative images of H&E staining and Masson's trichrome staining of wounds at 14 days post wounding. (C) Quantitative analysis of epithelium thickness and (D) collagen density. (mean  $\pm$  SD,  $n = 6$ ,  $*p < 0.05$ ,  $**p < 0.01$ ,  $***p < 0.001$ , ns, not statistically significant, scale bar, 500  $\mu$ m).