

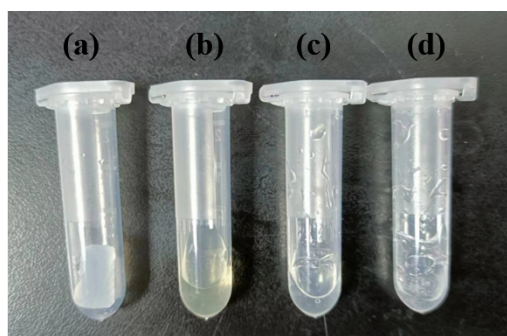
Supporting information of

Konjac glucomannan hydrogel dressing and its combination with Chinese medicine for wound treatment

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	a	b	c	d
pH 13.5	+	+	+	-
NaCl	+	+	-	+
-20 °C	+	-	+	+
Results	gel	solution	solution	solution

Fig. S1 Konjac glucomannan hydrogel prepared at different conditions.

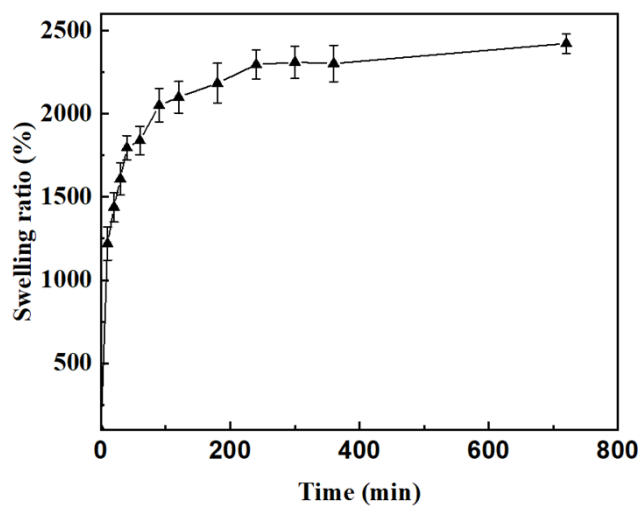
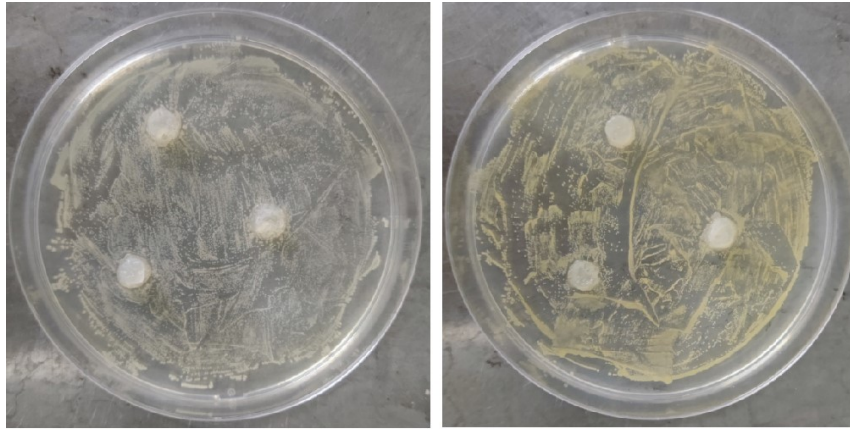


Fig. S2 The swelling ratio of KGM hydrogel.



E. coli

S. aureus

Fig. S3 Inhibition zone results of KGM hydrogel against *E. coli* and *S. aureus* (three parallel experiments were carried out).

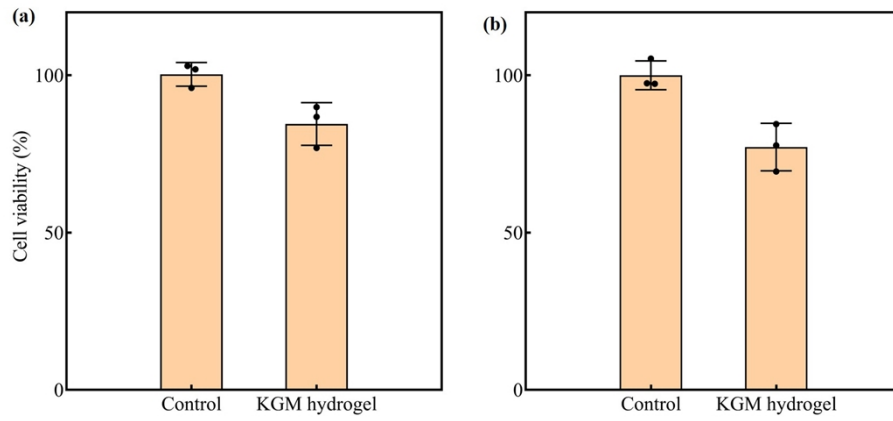


Fig. S4 The cell viability after co-incubation with KGM hydrogel for 24 (a) and 72 (b) h.

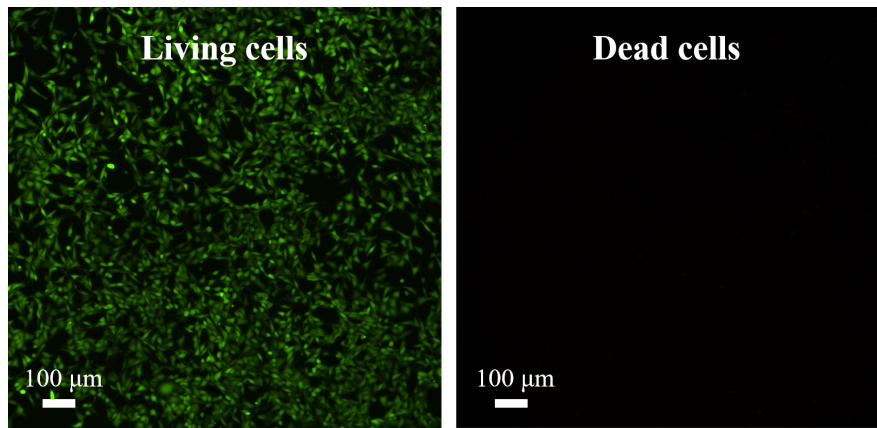


Fig. S5 CLSM images of L929 mouse fibroblast cells by live/dead staining. Live and dead cells were green and red, respectively.

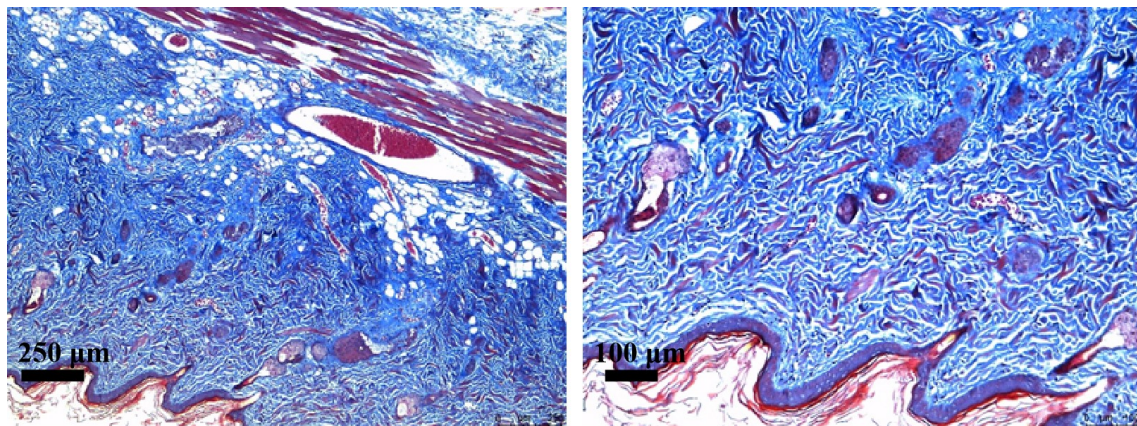


Fig. S6 Masson staining images of normal skin.

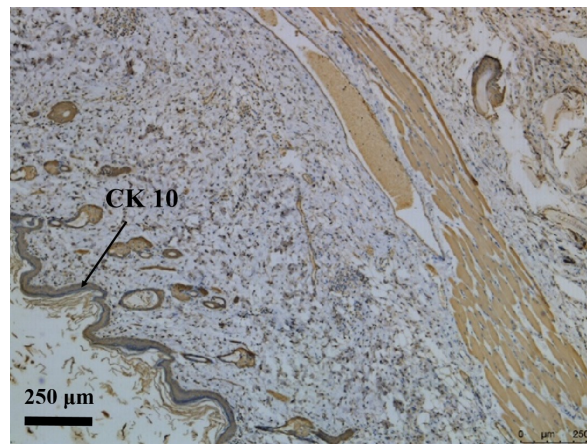


Fig. S7 CK10 staining image of normal skin.

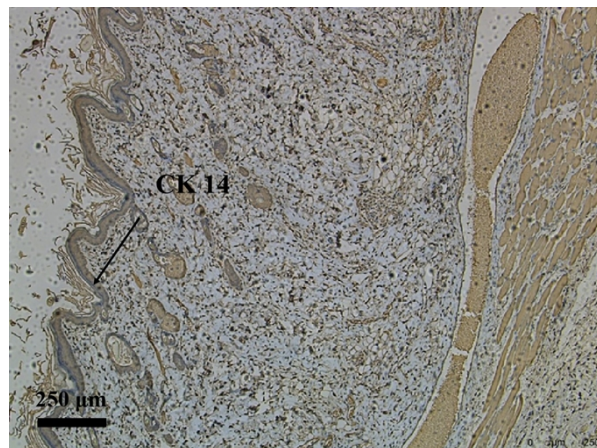


Fig. S8 CK14 staining image of normal skin.

Table S1. Physical properties of KGM hydrogel before and after UV treatment.

	Hardness (g)	springiness	cohesiveness	Resilience
Before	1350	0.78	0.620	0.378
After	1330	0.767	0.618	0.376

Table S2. CK10 mRNA relative expression levels in the acute wound (n = 3, x ± s).

Constituencies	Day 3	Day 7	Day 14
Gauze	0.105 ± 0.057	0.136 ± 0.118	0.196 ± 0.034
Hydrogel	0.185 ± 0.075	0.258 ± 0.173	0.386 ± 0.184
<i>P</i> value	<i>P</i> > 0.05	<i>P</i> > 0.05	<i>P</i> > 0.05

Table S3. CK14 mRNA relative expression levels in the acute wound (n = 3, x ± s).

Constituencies	Day 3	Day 7	Day 14
Gauze	0.538 ± 0.08	0.716 ± 0.113	0.814 ± 0.047
Hydrogel	0.573 ± 0.143	0.990 ± 0.138	1.221 ± 0.086
<i>P</i> value	<i>P</i> > 0.05	<i>P</i> > 0.05	<i>P</i> < 0.05

Table S4. CK10 mRNA relative expression levels in the chronic wound (n = 3, x ± s).

Constituencies	Day 3	Day 7	Day 14
Hydrogel	0.066 ± 0.027	0.133 ± 0.04	0.209 ± 0.030
WF + Hydrogel	0.082 ± 0.046	0.149 ± 0.069	0.238 ± 0.106
ARO + Hydrogel	0.056 ± 0.025	0.171 ± 0.073	0.328 ± 0.055

Table S5. CK14 mRNA relative expression levels in the chronic wound (n = 3, x ± s).

Constituencies	Day 3	Day 7	Day 14
Hydrogel	0.214 ± 0.095	0.408 ± 0.146	0.540 ± 0.078
WF + Hydrogel	0.289 ± 0.056	0.492 ± 0.096	0.566 ± 0.008
ARO + Hydrogel	0.339 ± 0.011	0.649 ± 0.116	0.734 ± 0.154