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Supporting Information

Multifunctional hydrogel dressing based on fish gelatin/oxidized hyaluronate for promoting diabetic wound healing

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| Hydrogel | Name | Degree of crosslinking |
|----------|-------|------------------------|
| (FG:OHy) | | (%) |
| 8:2 | FOHI | 71.50 ± 0.31 |
| 6:4 | FOHII | 49.64 ± 0.55 |

Table S1. Degree of crosslinking of hydrogels using ninhydrin assay.



% Degree of crosslinking = $\frac{non \ crosslinked \ sample \ (FG) - \ crosslinked \ sample \ (Hydrogel)}{|I| \ |I| \ |I|$ non crosslinked sample (FG)



Figure S1. The effect on (A) cell viability and (B) NO levels after treatment with extracted fish gelatin (FG), porcine gelatin (PG) and oxidized hyaluronate (OHy) in LPS-induced RAW 264.7 macrophage.



Figure S2. The viscoelasticity–angular frequency curve in the rheological characterization of fabricated hydrogels.



Figure S3. Direct contact testing of hydrogels for 24 h. Fluorescence microscopic images of Live/Dead staining of (A) HDF and (B) HaCaT cells after co-incubation of hydrogels.



Figure S4. (A) Representative images of the wounds treated with or without hydrogels at day 0, 3, 7, 10 and 14 post-wounding in non-diabetic mice. (B) Quantification of relative wound area.