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## **Supporting information**

## Bioinspired aligned wrinkling dressings for monitoring joint motion and promoting joint wound healing

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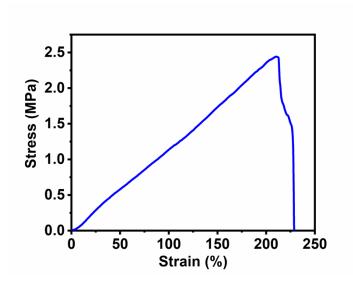


Figure S1. Tensile stress-strain curve of the bioinspired dressing.

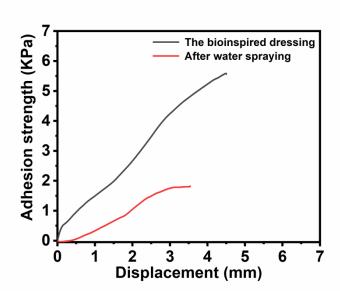


Figure S2. The adhesion strength of the bioinspired dressing before and after spraying with water.

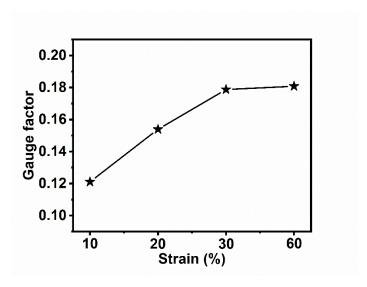


Figure S3. The gauge factors of dressing in different tensile strains.

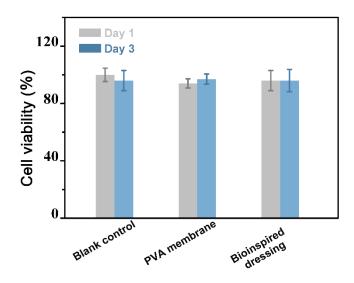


Figure S4. In vitro cytotoxicity of the bioinspired dressing, the single-layered PVA membrane, and the blank group.

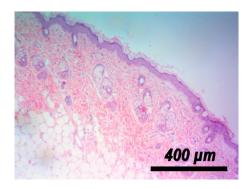


Figure S5. H&E staining result of the normal mouse skin.

Movie S1. Formation of bioinspired aligned wrinkles on wet pork skin.