



Supporting Information

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A Colorimetric Dermal Tattoo Biosensor Fabricated by Microneedle Patch for Multiplexed Detection of Health-related Biomarkers

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Supporting Information

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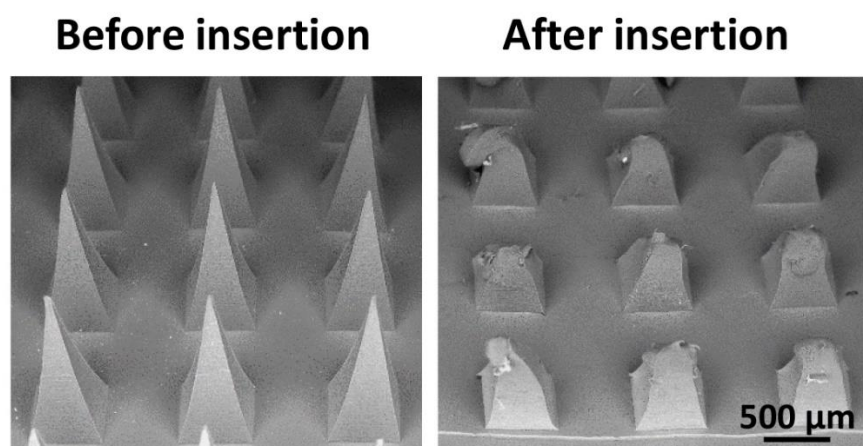


Figure S1. SEM images of the microneedle patch before and after inserting in skin.

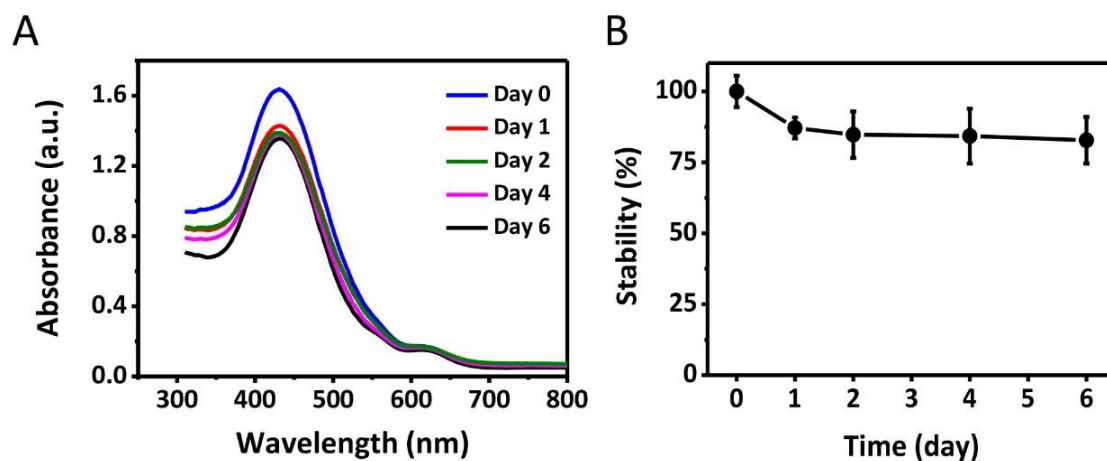


Figure S2. Stability of the pH sensor. (A) Absorbance spectra of pH sensor which reacted with PBS (pH = 7) for different time (0 to 6 days). (B) The stability of the pH sensor after reacting with PBS (pH = 7).

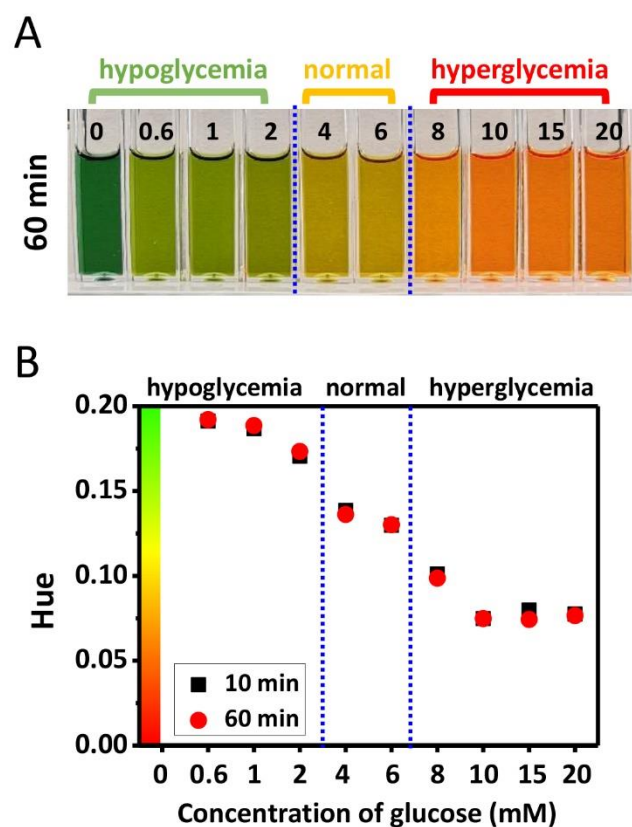


Figure S3. Stability of the glucose colorimetric tattoo biosensor. (A) Images of the glucose indicators after reacting with glucose solution for 60 min. (B) The relationship between the Hue values extracted from the images in (A) and the glucose concentration.

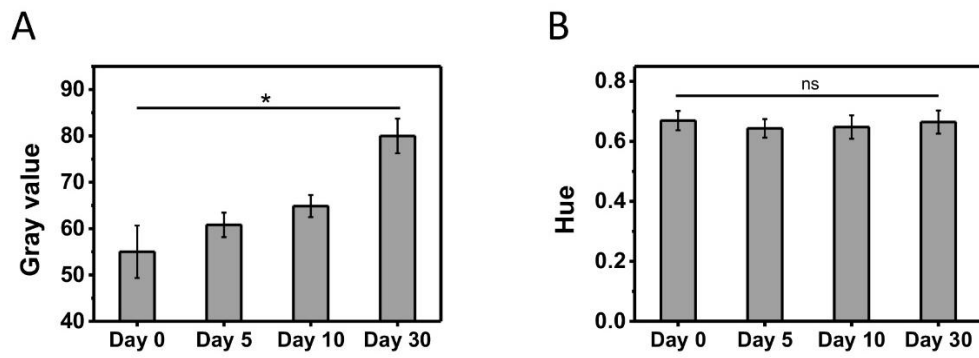


Figure S4. The changes of gray values (A) and Hue (B) of tattoo images in Figure 1D (upper row) with time. “*” means significant difference ($p < 0.05$); “ns” means no significant difference ($p > 0.05$).

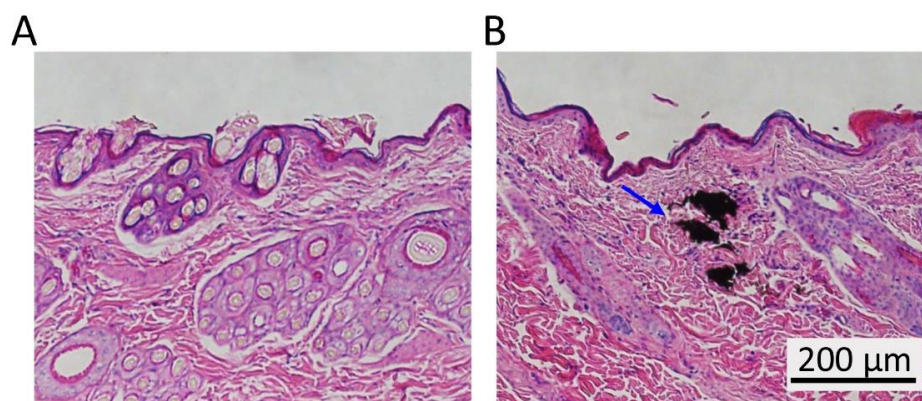


Figure S5. Toxicity of the dermal tattoo biosensor ink. Images of H&E stained skin before (A) and after (B) applying tattoo sensors. The blue arrow points to the biosensor ink.