

Supporting Information

Nanoenzyme-chitosan hydrogel complex with cascade catalytic and self-reinforced antibacterial performance for accelerated healing of diabetic wounds

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Keywords: Diabetic chronic wound, enzyme, oxygen, cascade reaction

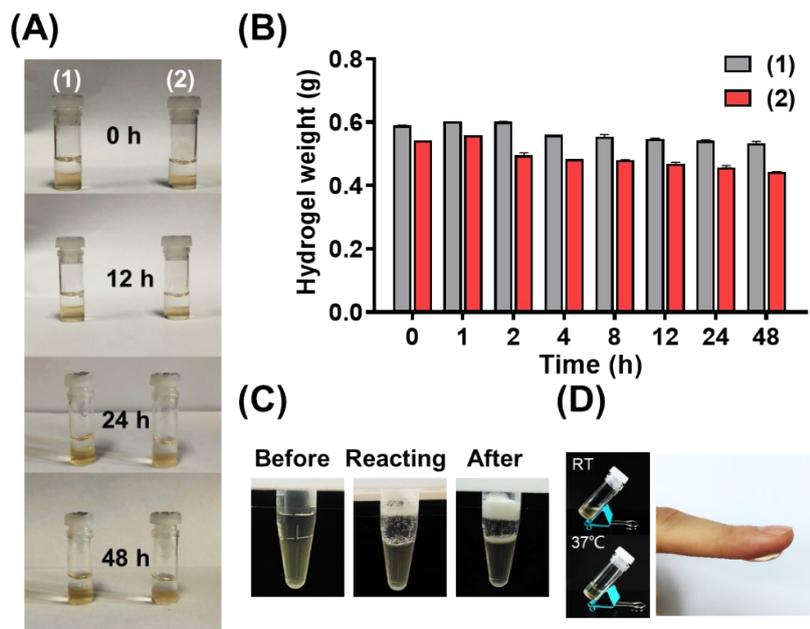


Figure S1. (A) Stability evaluation of GCNC hydrogel complex at different time points under the (1) PBS and (2) the PBS (pH=5) with glucose, acid and H₂O₂. (B) Changes in the weight of GCNC hydrogel complex at different time points under the (1) PBS and (2) the PBS (pH=5) with glucose, acid and H₂O₂. (C) Photographs of bubble production after adding 30% H₂O₂ into GCNC hydrogel complex. (D) Evaluation of injectable and adhesive property of GCNC hydrogel complex.

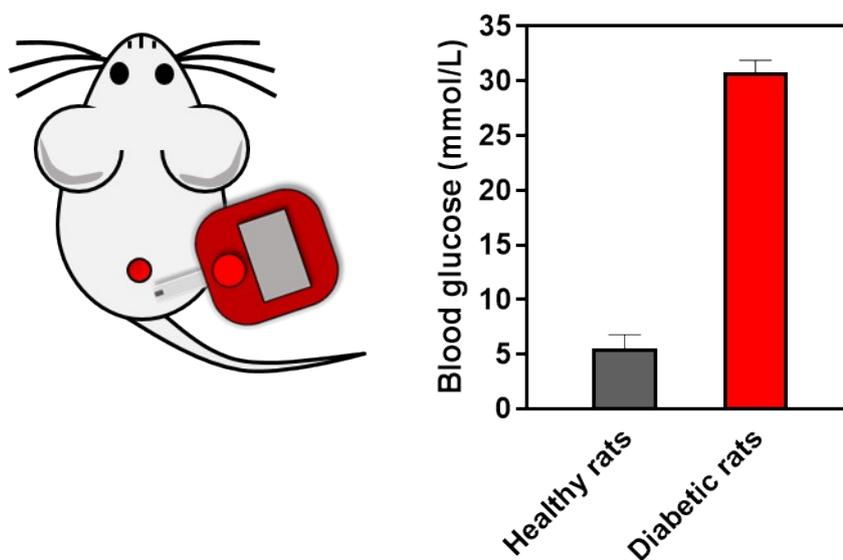


Figure S2. Blood glucose levels at the wound of the health SD rats and SD diabetic rats were randomly measured using a glucose meter.

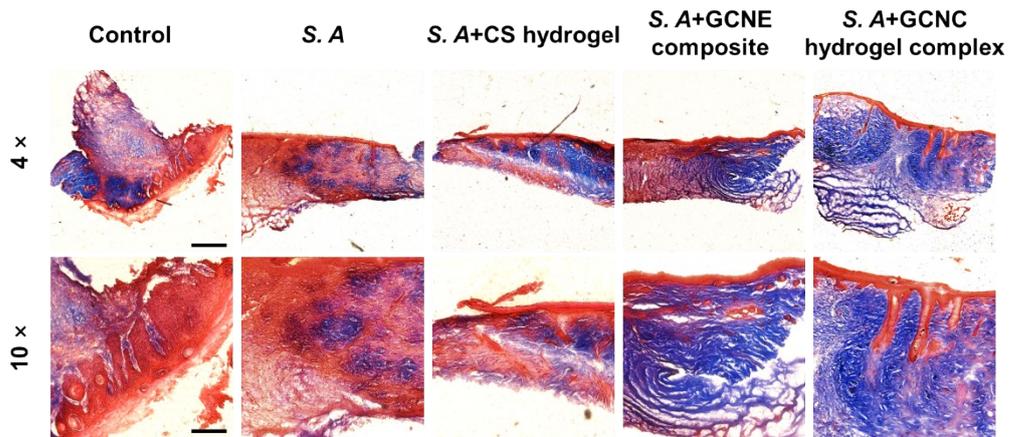


Figure S3. Photomicrographs of skin tissues with Masson's Trichrome staining of the wounds. Scale bar, 200 μ m.

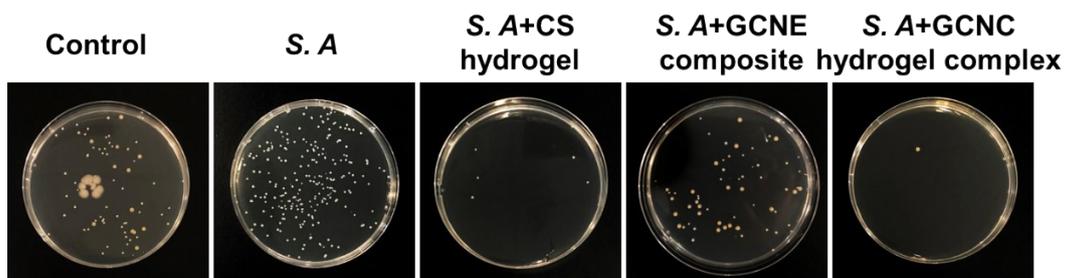


Figure S4. Photographs of solid LB agar plates of bacterial colonization in skin tissues.

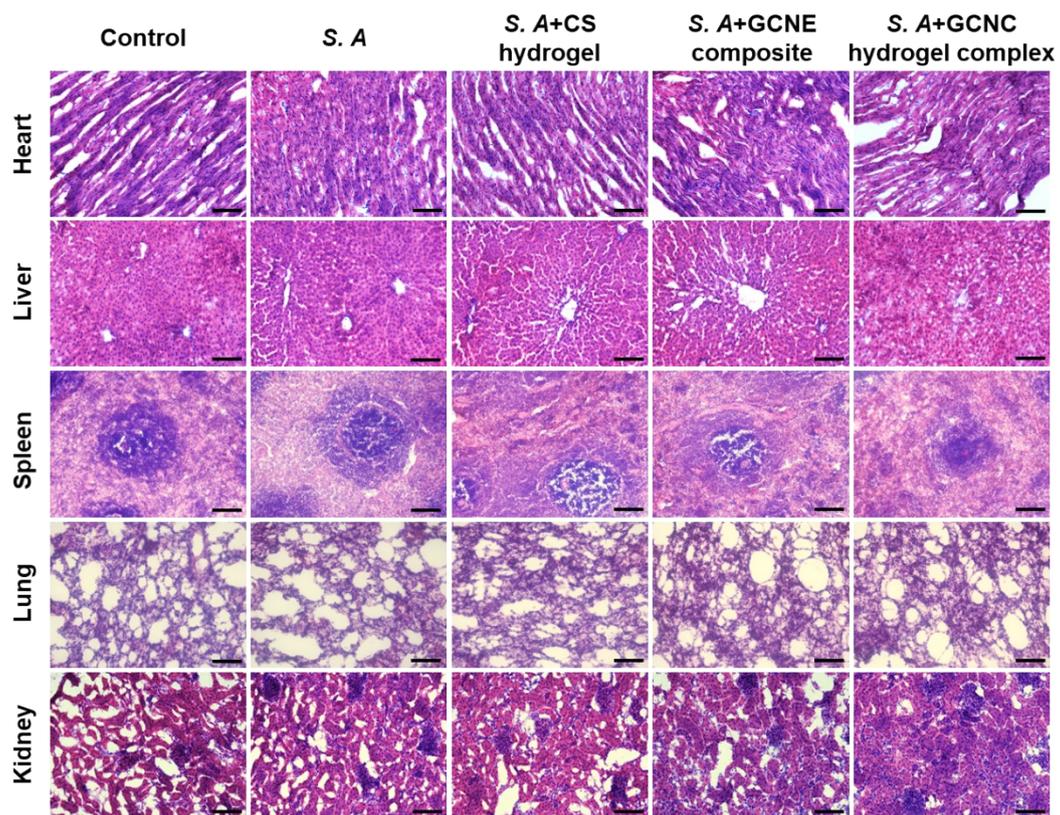


Figure S5. Histomorphometric analysis by H&E staining of organs from different treatment SD rats after 14 days. Scale bars, 100 μ m.