Electronic Supplementary Material (ESI) for Nanoscale.

Supporting Information:

Glucose-Functionalized Au Nanoprisms for Optoacoustic Imaging and Near-Infrared Photothermal Therapy

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Figure S1. The evolution of the UV-vis absorption of Au NPrs purify through centrifugation. The centrifugal speed is from 4000 to 6000 rpm for 10 min three times.

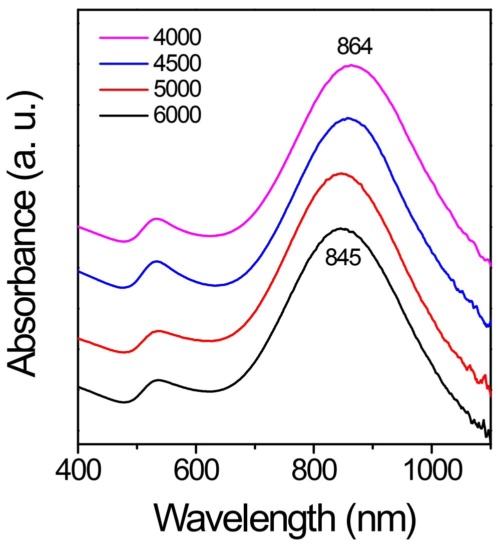

Figure S2. TEM image of Au@PEG NPrs.

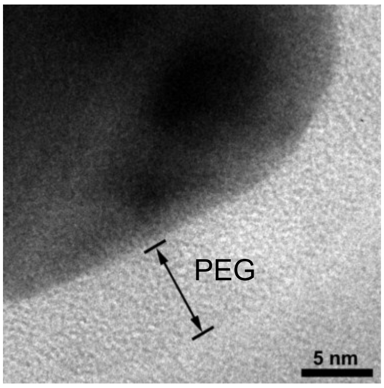

Figure S3. The UV-vis absorption of freshly prepared Au@PEG NPrs and 10 months stored Au@PEG NPrs.

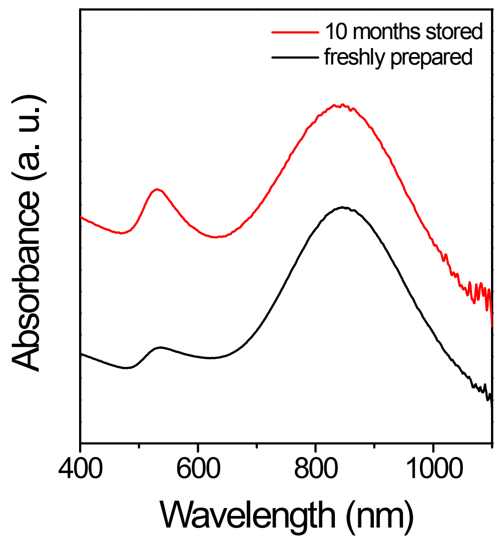

Figure S4. The UV-vis absorption of glucose.

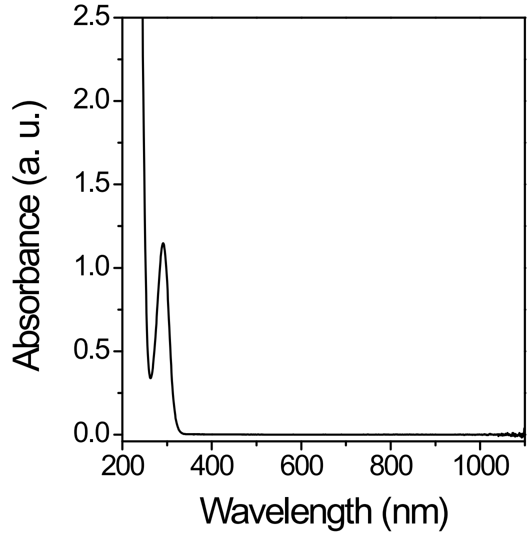

Figure S5. Cytotoxicity of Au@PEG-Glc NPrs, which is tested by incubating gastric cells in 100 μL culture medium with different concentrations of Au@PEG-Glc NPrs for 24 h, and followed by MTT assay. Data are shown as the means ± standard error of the means, * $p<0.05$ and ** $p<0.01$.

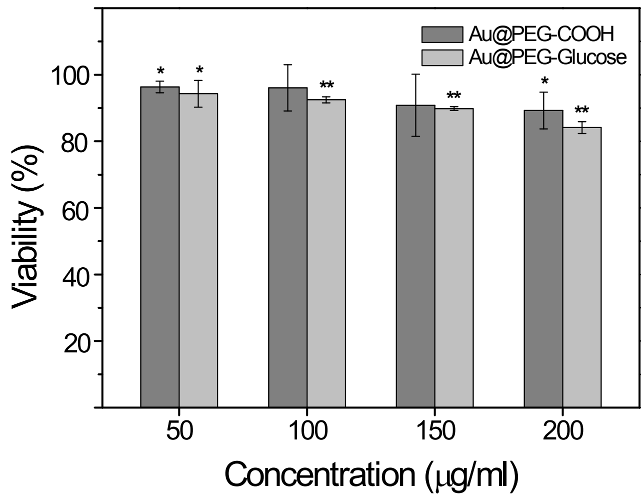

Figure S6. Gastric cell viabilities versus the concentration of Au@PEG-Glc NPrs, which is studied by 808 nm laser irradiation for 5 min (a). And gastric cell viabilities filled with 80 μg Au@PEG-Glc NPrs versus the irradiation time (b). Data are shown as the means ± standard error of the means, * $p<0.05$ and ** $p<0.01$.

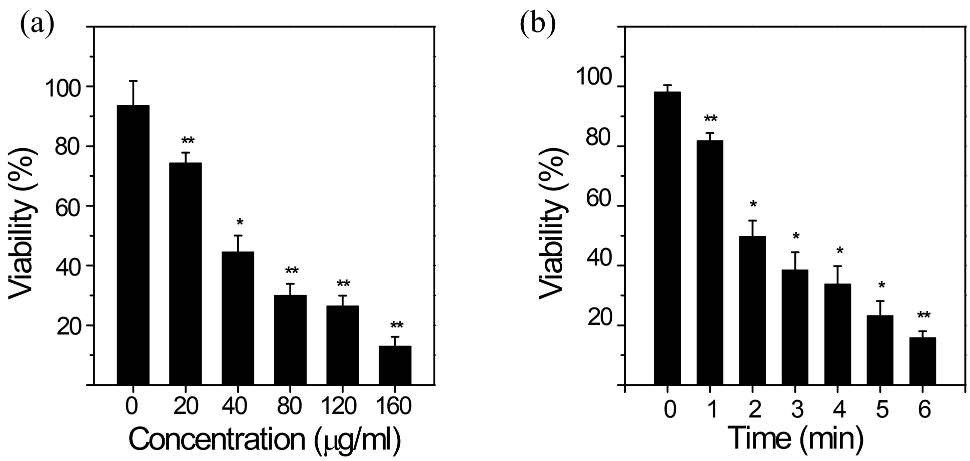

Figure S7. Optoacoustic signals of Au NPrs solution versus the concentration of

Au@PEG-Glc NPrs and the corresponding optoacoustic images.

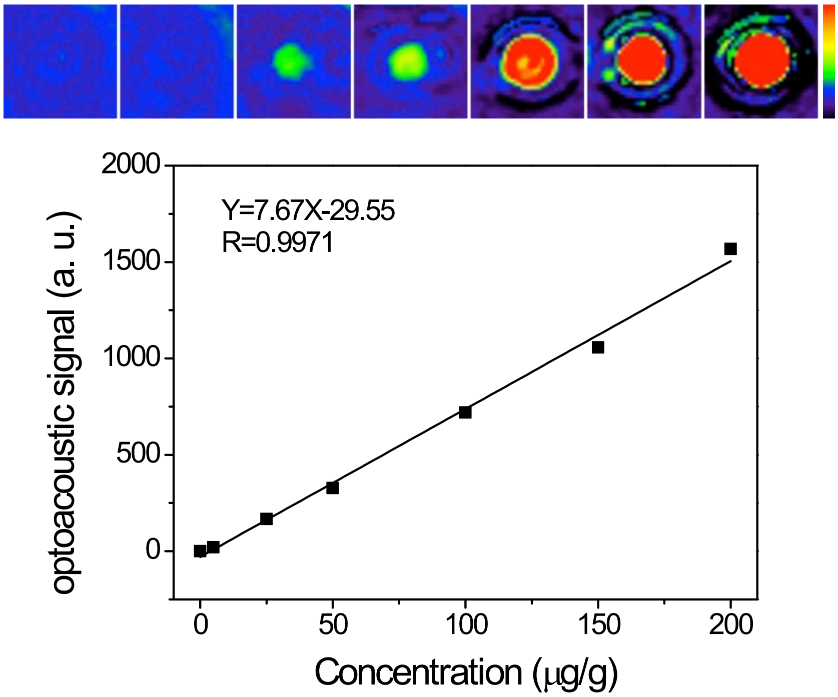

Figure S8. Optoacoustic signals of Au@PEG NPrs in tumor region acquired before injection (0 h) and after injection (2, 6, 12, 18 and 24 h). The scale bar is 2 mm.

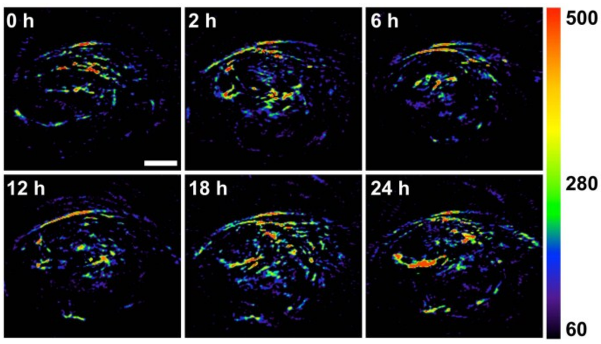

Figure S9. Photograph of the cured mouse through photothermal therapy after two months.