An injectable hydrogel with photothermal therapy and

chemodynamic therapy for targeted promotion of ferroptosis in oral

squamous cell carcinoma

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Figure S1. Morphology and thickness analysis of PCu nanoparticles by atomic force microscopy.



Figure S2. Zeta potential of PCu and PDA nanoparticles.



Figure S3. SEM of PDA (Error bar = 5 μ m).





30 min



Figure S5. The general image of different components reacting with DTNB (1:DTNB GSH; 2: GSH; 3: H₂O₂ +DTNB; 4: DTNB + Cu²⁺).



Figure S6. UV absorption standard curve of GSH at 412 nm.



Figure S7. Viscoelasticity analysis (1Hz, 1%) of CH hydrogels in different ratios (CH11 represents a CMCS/HA-CHO ratio of 1:1, CH21 represents a CMCS/HA-CHO ratio of 2:1, CH12 represents a CMCS/HA-CHO ratio of 1:2).



Figure S8. Rheological characteristics of CH (A) and CHPP (B) hydrogels under low stresses (1Hz, 1%).



Figure S9. Images of the viscosity of CHPP hydrogels as a function of shear force.



Figure S10. Biocompatibility analysis of hydrogels with CAL-27 (A), HSC-3 (B), and NIH-3T3 cells (C, D).



Figure S11. HE staining of the CHPP hydrogels and its surrounding tissue of each group of mice (A) (Scale bar: 250 µm). Degradation of CHPP hydrogels in vivo at 3, 7, 10, 14 days (B).



Figure S12. HE staining of the heart, liver, spleen, lungs and kidneys of each group of mice (Scale bar: 250 µm).