

Supporting Information

A biomimetic nanodrug self-assembled from small molecules for enhanced ferroptosis therapy

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Fig. S1 ¹H-NMR spectrum of compound DSe (in DMSO-d₆).

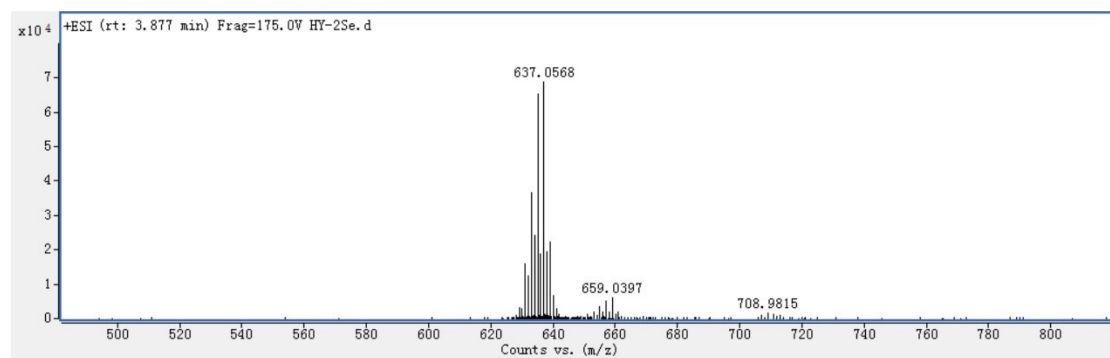


Fig. S2 HR-MS of compound DSe.

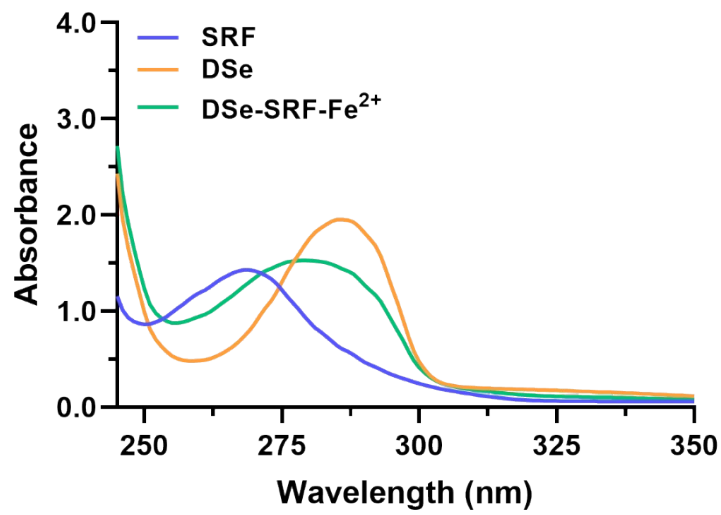


Fig. S3 UV-vis absorption spectra of DSe, SRF and DSe-SRF-Fe²⁺.

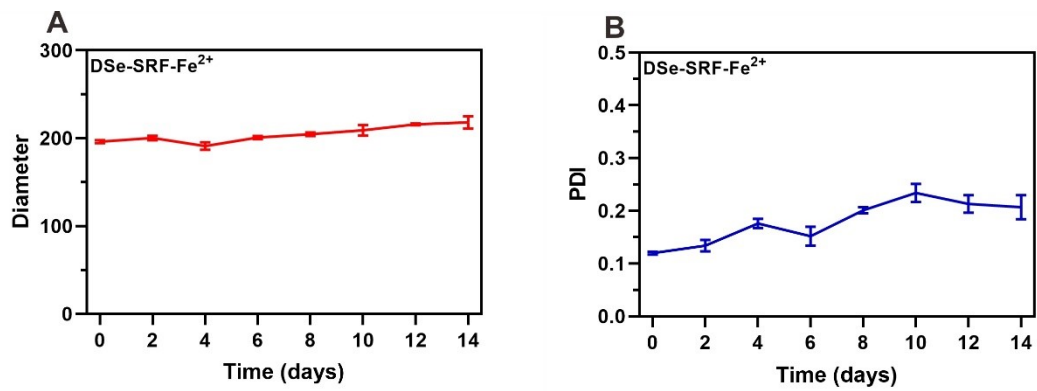


Fig. S4. Diameters (A) and PDI (B) for DSe-SRF-Fe²⁺ was determined by DLS in PBS buffer (pH 7.4) for 14 days.

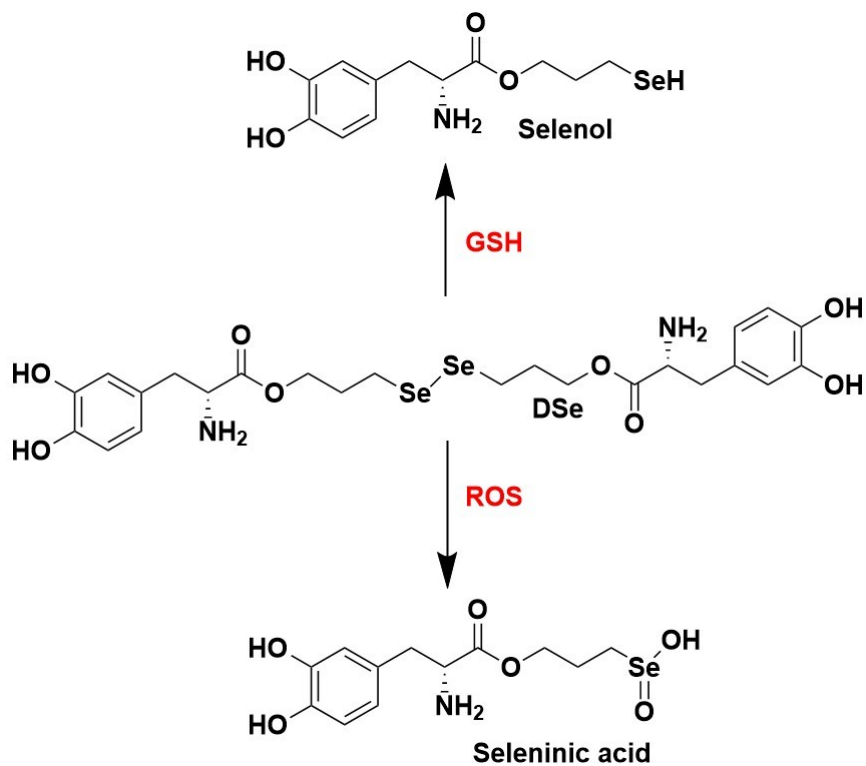


Fig. S5 The response mechanism of DSe in high levels of GSH or ROS environments.

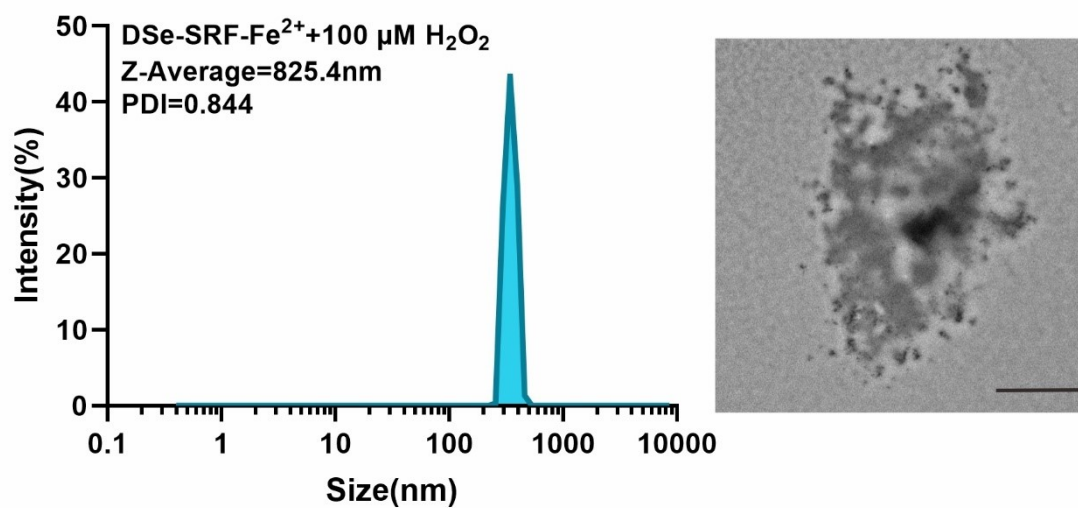


Fig. S6 DLS and TEM image of CM-DSe-SRF-Fe²⁺ after incubation with 100 μM H₂O₂, scale bar: 500 nm.

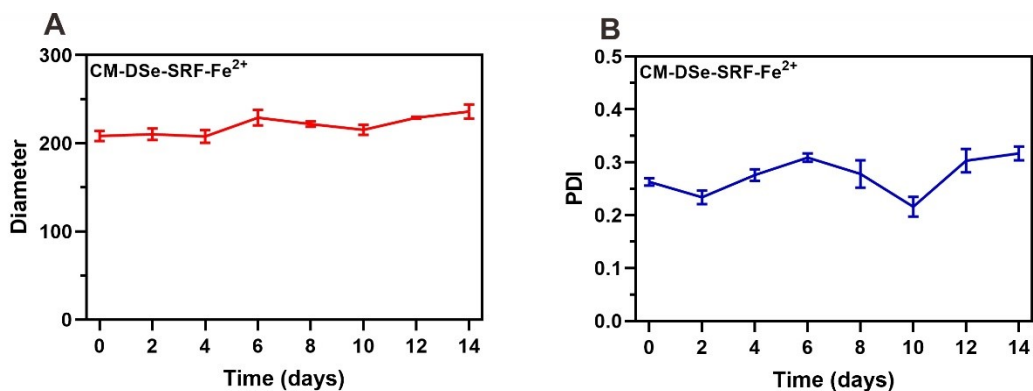


Fig. S7 Diameters (A) and PDI (B) for CM-DSe-SRF-Fe²⁺ was determined by DLS in PBS buffer (pH 7.4) for 14 days.

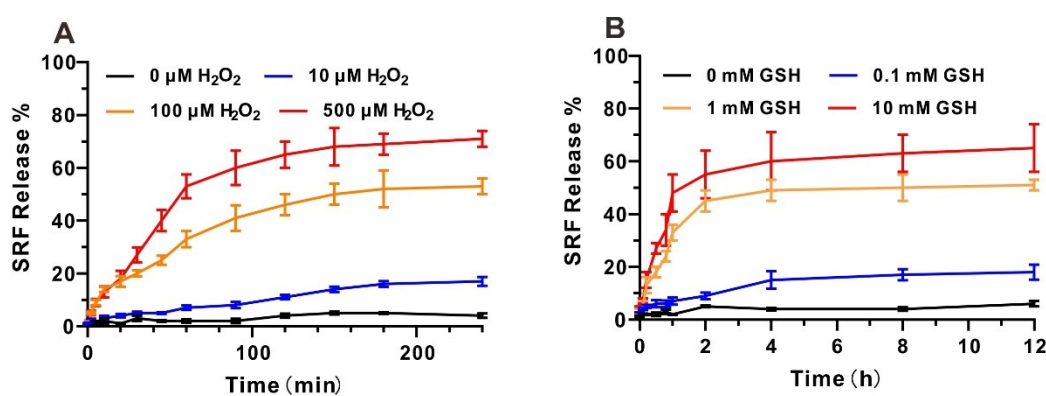


Fig. S8 A) The SRF release behavior from CM-DSe-SRF-Fe²⁺ in the presence of H₂O₂ (0, 10, 100 and 500 μM) for 240 min (pH 7.4 PBS buffer at 37 °C); B) The SRF release behavior from CM-DSe-SRF-Fe²⁺ in the presence of GSH (0, 0.1, 1 and 10 mM) for 12 h (pH 7.4 PBS buffer at 37 °C).

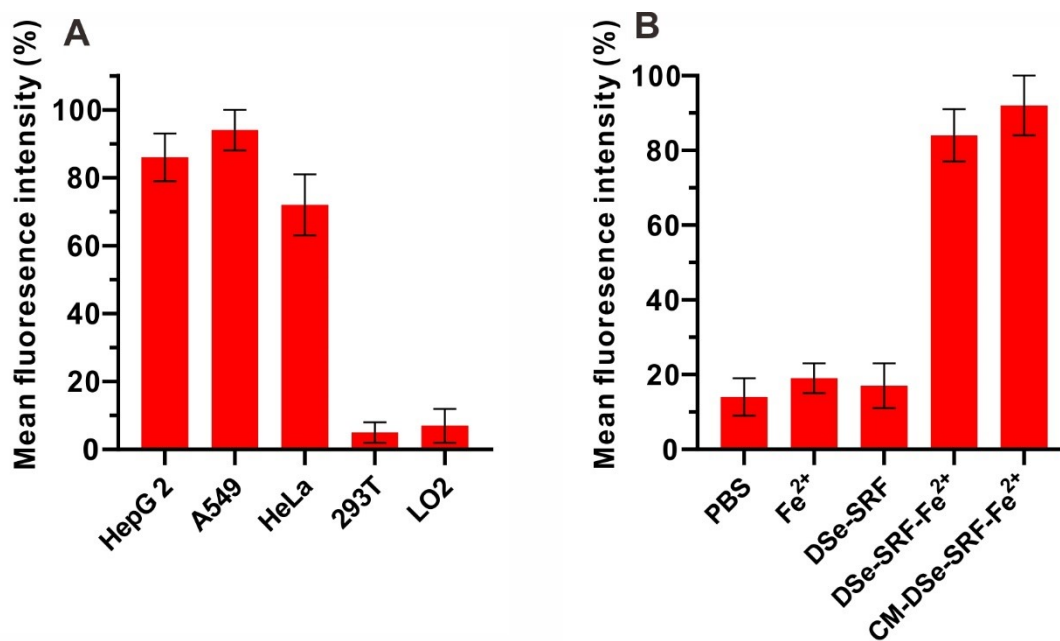


Fig. S9 Quantitative analysis of the fluorescence intensity of A) 3A and B) 3B by image J.

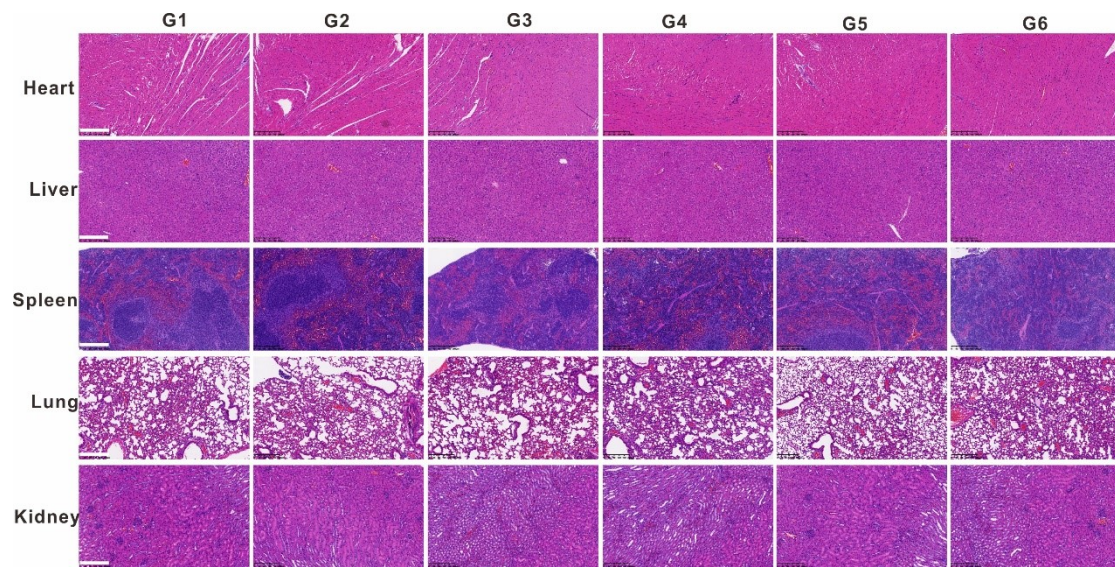


Fig. S10 The H&E staining results of the major organs (heart, liver, spleen, lung and kidney) with different formulations (G1-G6), scale bars: 200 μm .