

**Synergistic Immunotherapy with a Calcium-Based Nanoinducer: Evoking Pyroptosis and Remodeling Tumor-Associated Macrophages for Enhanced Antitumor Immune Response**

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**Keywords**

Pyroptosis, calcium overload, immunogenic cell death, immunotherapy, tumor-associated macrophages,

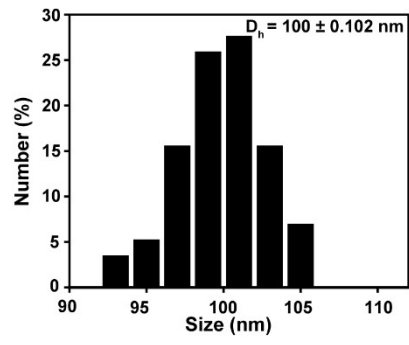


Figure S1. The size distribution of CaZC NPs.

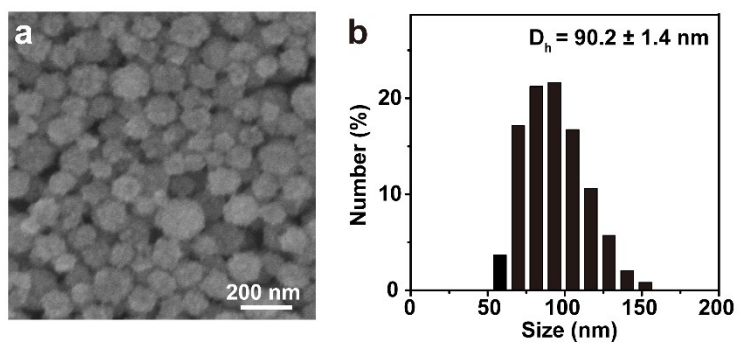


Figure S2. (a) SEM image and (b) the corresponding size distribution of  $\text{CaO}_2$  NPs.

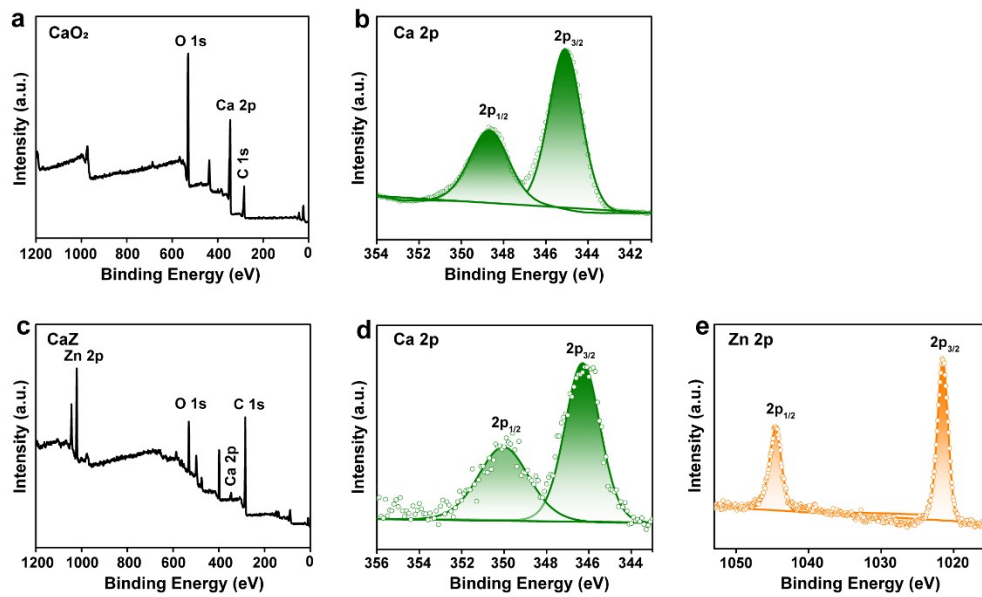


Figure S3. XPS spectra of (a)  $\text{CaO}_2$  NPs and (b) and CaZ NPs.

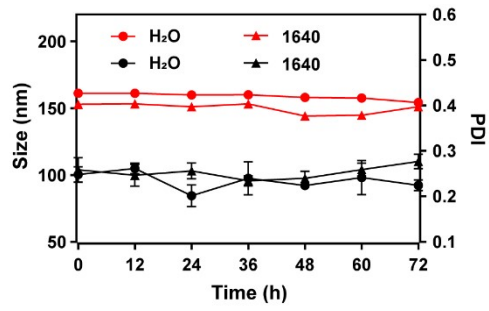


Figure S4. The particle size and polydispersity index (PDI) of CaZCH NPs over time (red: size, black: PDI).

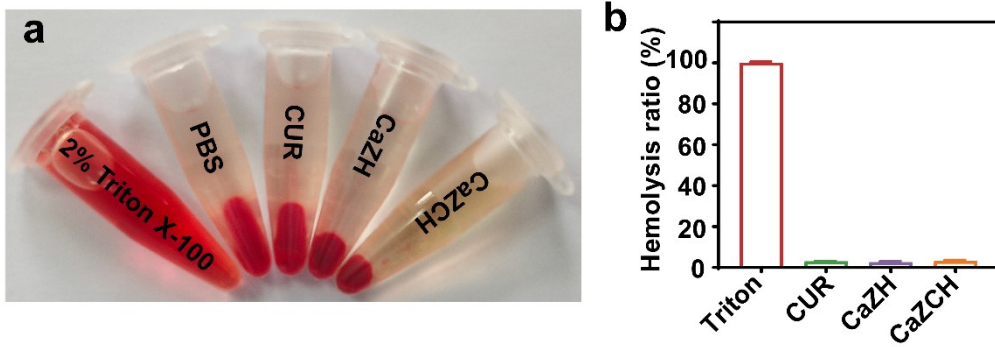


Figure S5. (a) Hemolysis pictures of the different NPs, Triton X-100 was the positive control, and PBS was the negative control. (b) Hemolysis ratio analysis of the different NPs.

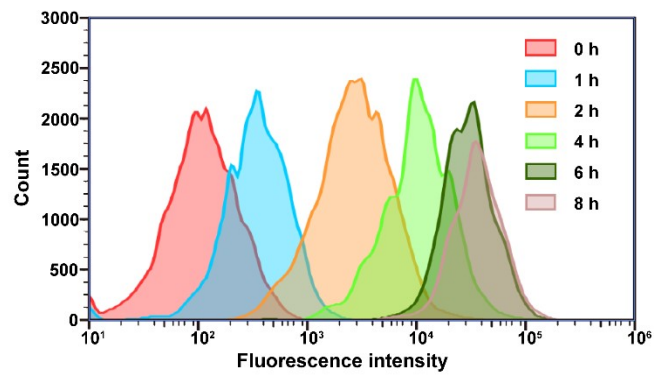


Figure S6. The cellular uptake of CaZCH NPs for different durations.

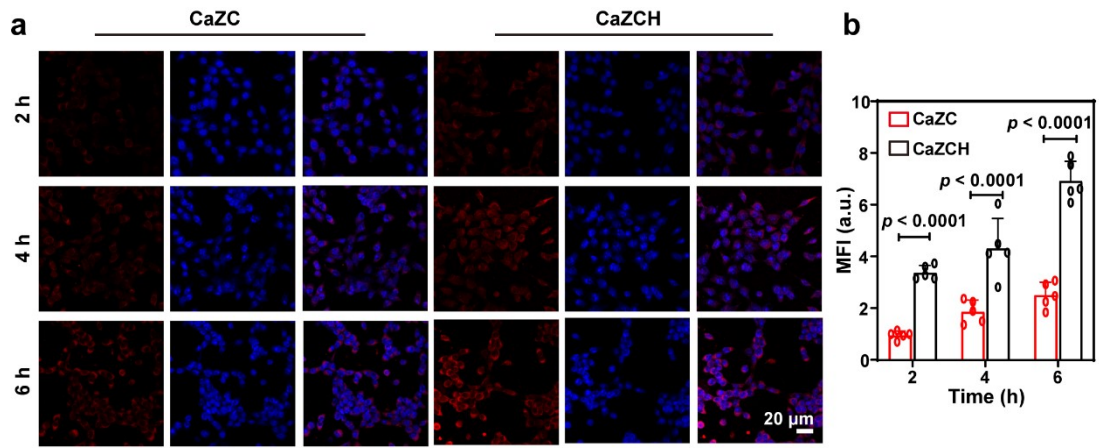


Figure S7. (a) Intracellular fluorescence intensity and (b) quantitative analysis of CaZC and CaZCH labeled with Rhodamine B incubation with CT26 cells for different times.



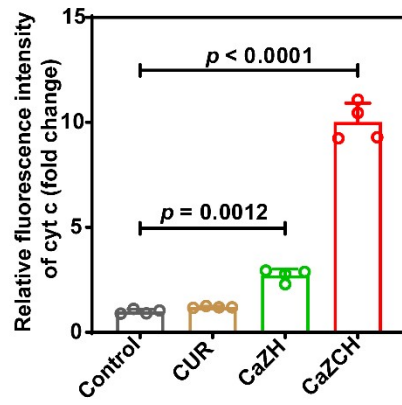


Figure S8. The relative fluorescence intensity of cyt c after various treatments.

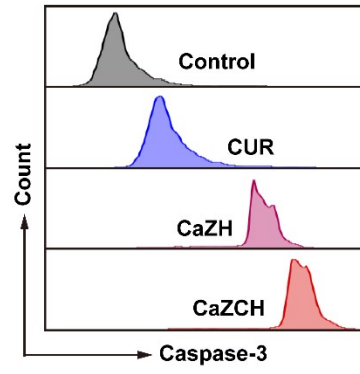


Figure S9. The relative fluorescence intensity of activated caspase-3.

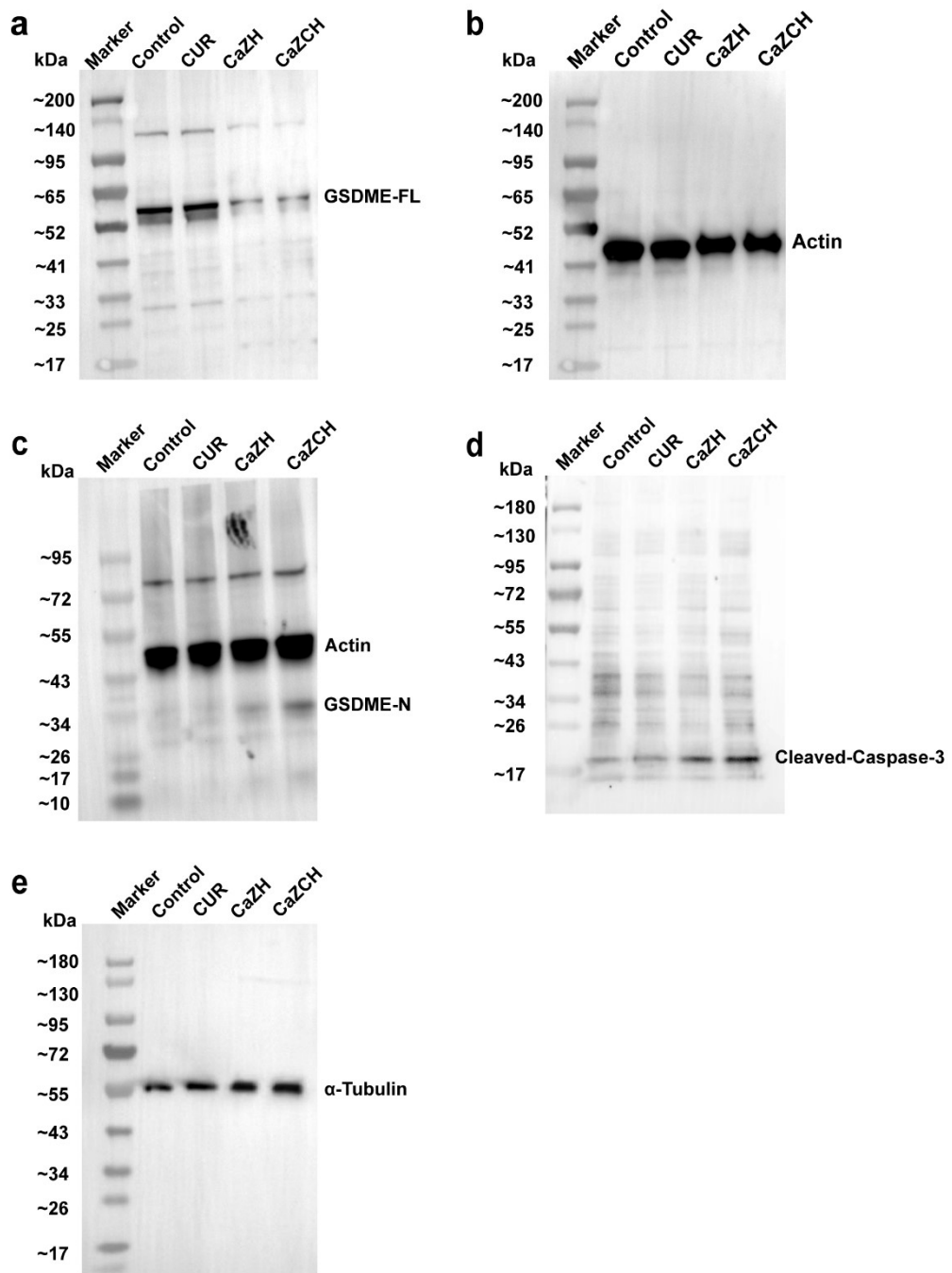


Figure S10. Uncropped western blot for Figure 4f.

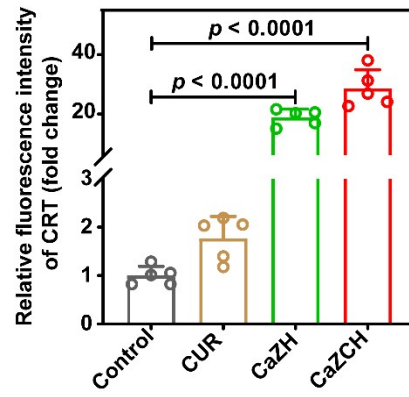


Figure S11. The relative fluorescence intensity of CRT after various treatments.

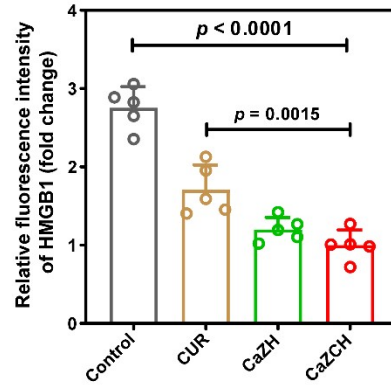


Figure S12. The relative fluorescence intensity of HMGB1 after various treatments.

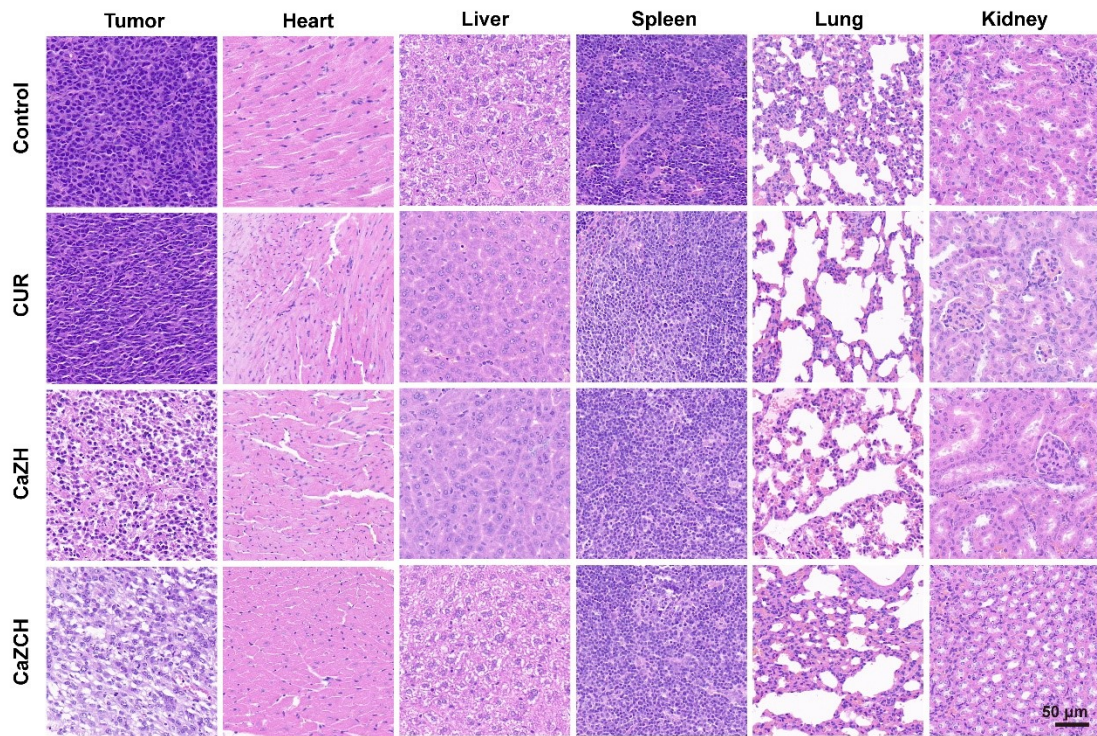


Figure S13. H&E staining of the major organs (heart, liver, spleen, lung and kidney) after different treatments.