

## Supplementary materials

### **Local delivery of sunitinib and Ce6 via redox-responsive zwitterionic hydrogels effectively prevents osteosarcoma recurrence**

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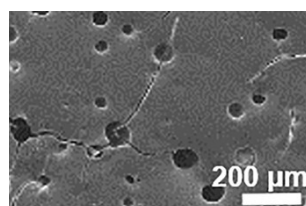
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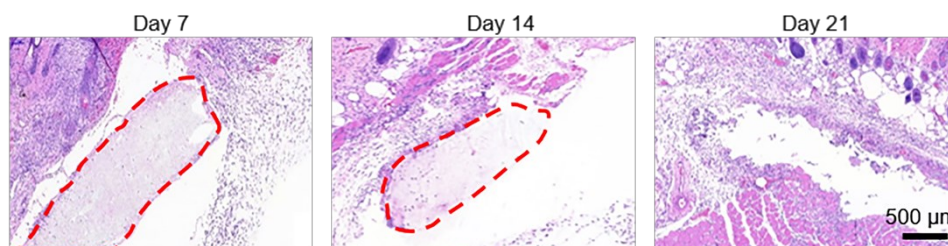
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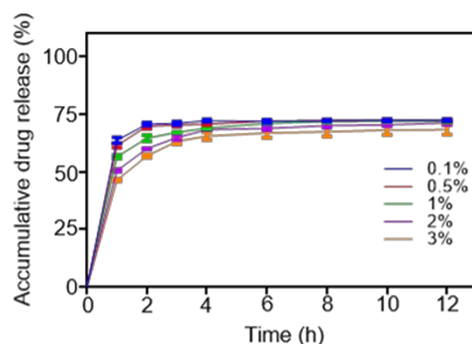
Professor Xintao Shuai, Email: [shuaixt@mail.sysu.edu.cn](mailto:shuaixt@mail.sysu.edu.cn).



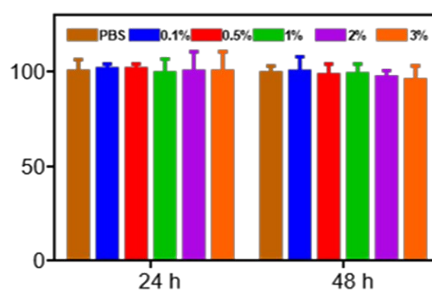
**Fig. S1** SEM image of Sun and Ce6 co-loaded DSDMA-SBMA hydrogels at 2% crosslinker.



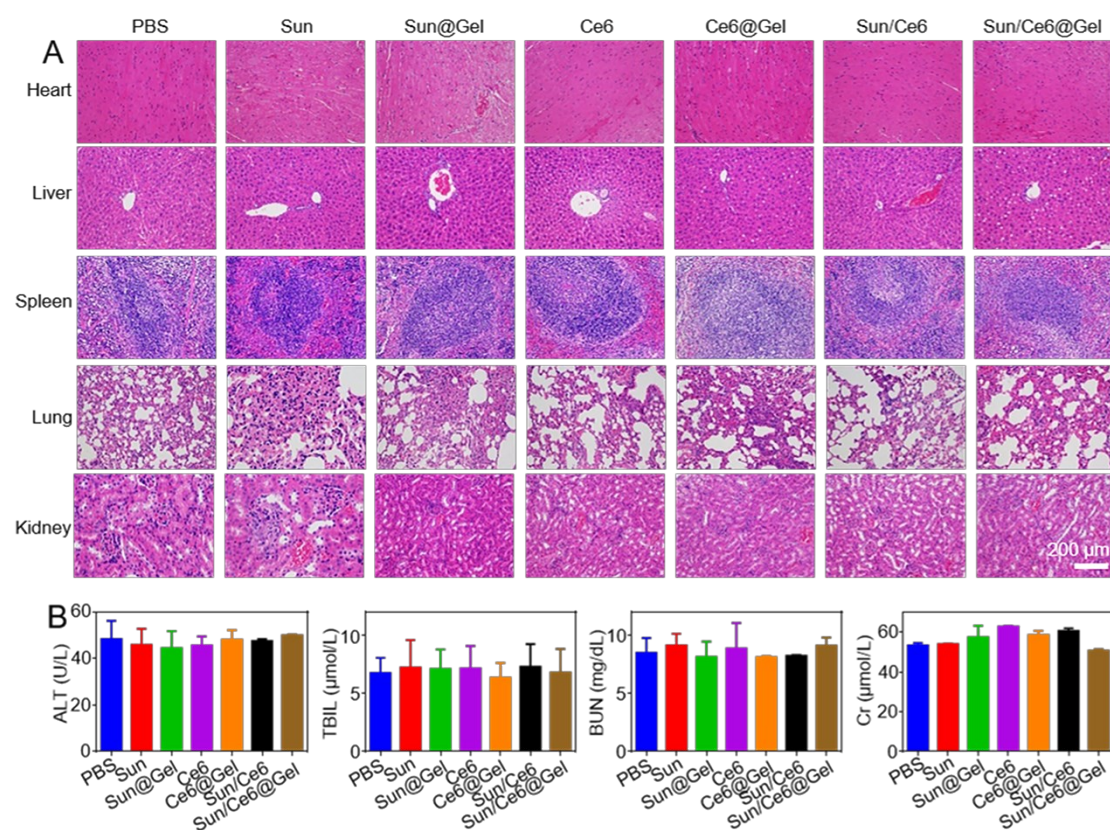
**Fig. S2** Degradation profiles of DSDMA-SBMA hydrogels with cross-linker content of 2% by mass ratio at days 7, 14, 21 after subcutaneous implantation.



**Fig. S3** Cumulative release of Ce6 from DSDMA-SBMA hydrogels in PBS solution (n = 3; means  $\pm$  SD).



**Fig. S4** MTT assay of 143B cells cultured in media treated with DSDMA-SBMA hydrogels with cross-linker contents of 0.1, 0.5, 1, 2 and 3% by mass ratios for 24 h and 48 h (n = 3; means  $\pm$  SD).



**Fig. S5** Systemic toxicity assessment of local treatment. (A) The *in vivo* toxicity to the main organs of the mice receiving free drug or drug-loaded hydrogels was evaluated by H&E staining. (B) The serum biochemistry assays showed the levels of ALT, TBIL, BUN and Cr (n = 3; means  $\pm$  SD).