Supplementary Information

Non-triggered sequentially-released liposomes enhance anti-breast cancer efficacy of STS and celastrol-based microemulsion

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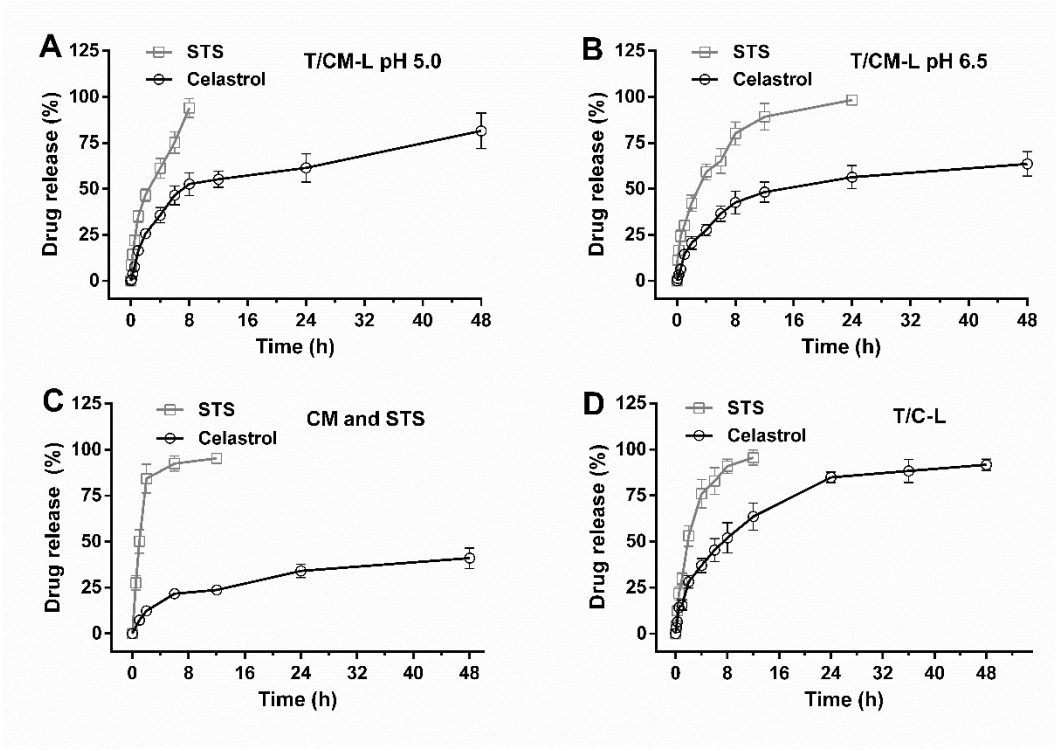

Fig. S1. *In vitro* accumulative drug release of T/CM-L at (A) pH 5.0 and (B) pH 6.5, (C) CM and STS and (D) T/C-L under PBS of pH 7.4 within 48 h. Data are represented as mean ± SD; n = 3.

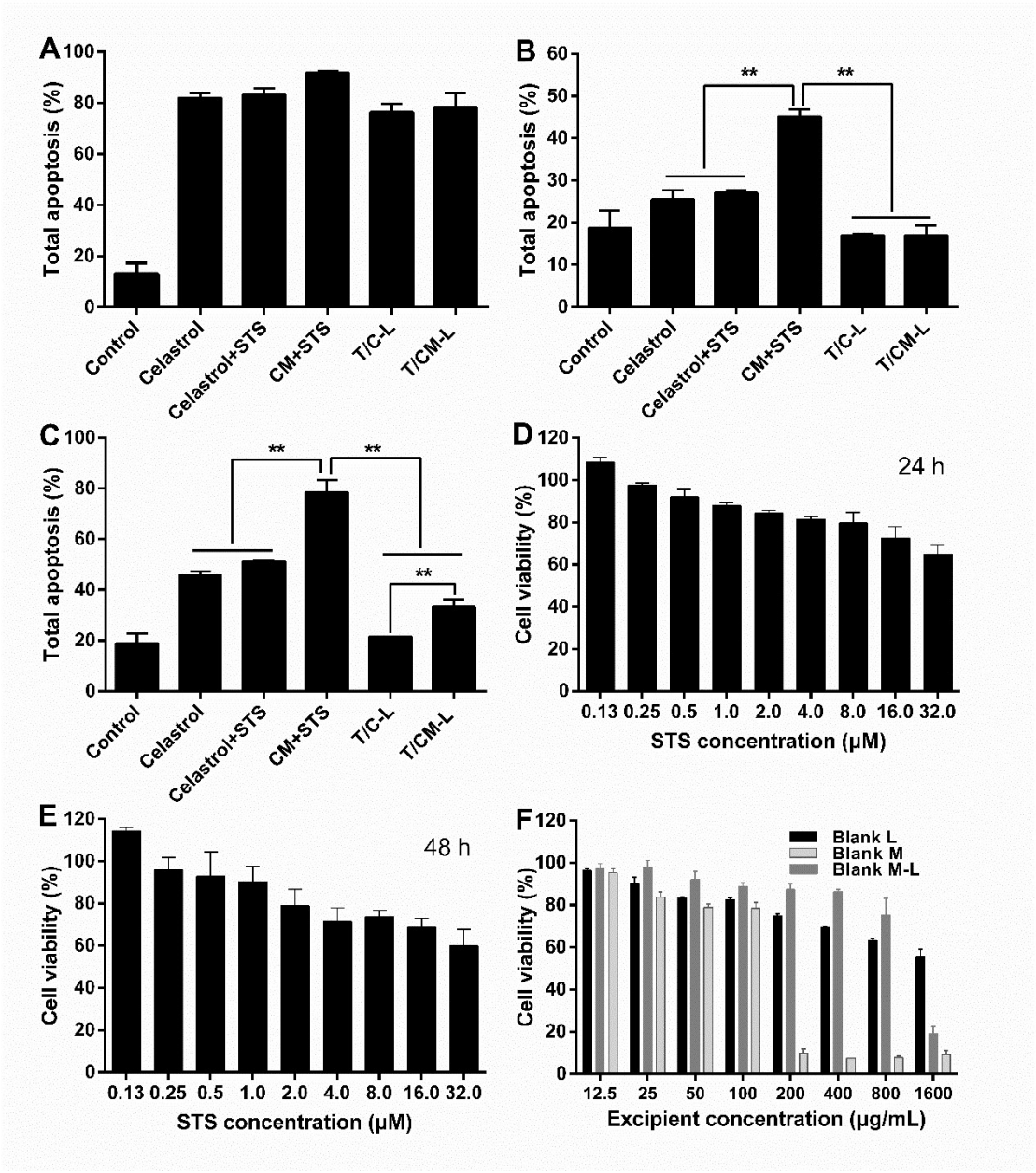

Fig. S2. Cell apoptosis and cytotoxicity. (A) Quantification of apoptosis ratio on MCF-7 cells treated with different formulations at a celastrol concentration of 2.5 μg/mL for 10 h. Quantification of apoptosis ratio on MCF-7 cells treated with different formulations at a celastrol concentration of (B) 0.5 μg/mL and (C) 1.0 μg/mL for 5 h. Data are represented as mean ± SD; n = 3. $^{**}P < 0.01$. Cytotoxicity of STS against MCF-7 cells for (D) 24 h and (E) 48 h. Data are represented as mean ± SD; n = 6. (F) Antiproliferative effect of blank carrier toward L-02 cells for 48 h. Data are represented as mean ± SD; n = 6.

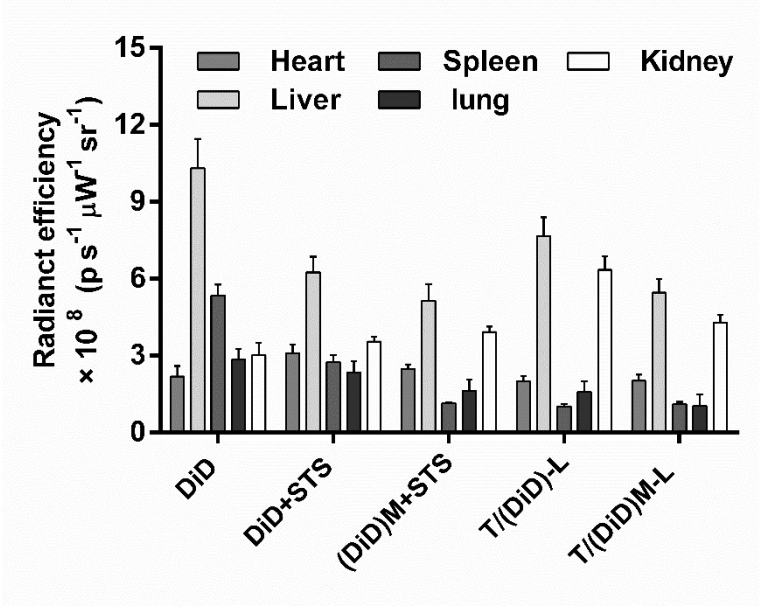

Fig. S3. Quantification of distribution of fluorescence in main normal organs after 24 h of the administration. Data are represented as mean ± SD; n = 3.

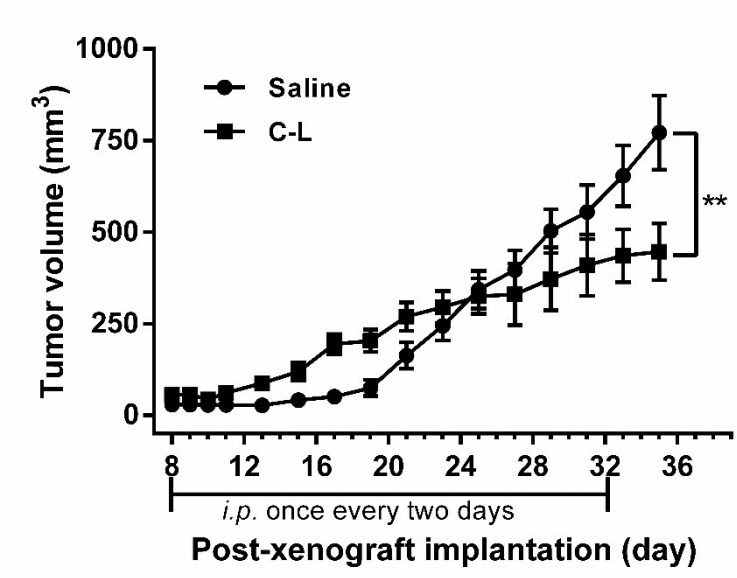

Fig. S4. Curve of the tumor growth of mice treated with C-L during the observation period. Data are represented as mean ± SD; n = 6. $^{**}P < 0.01$.

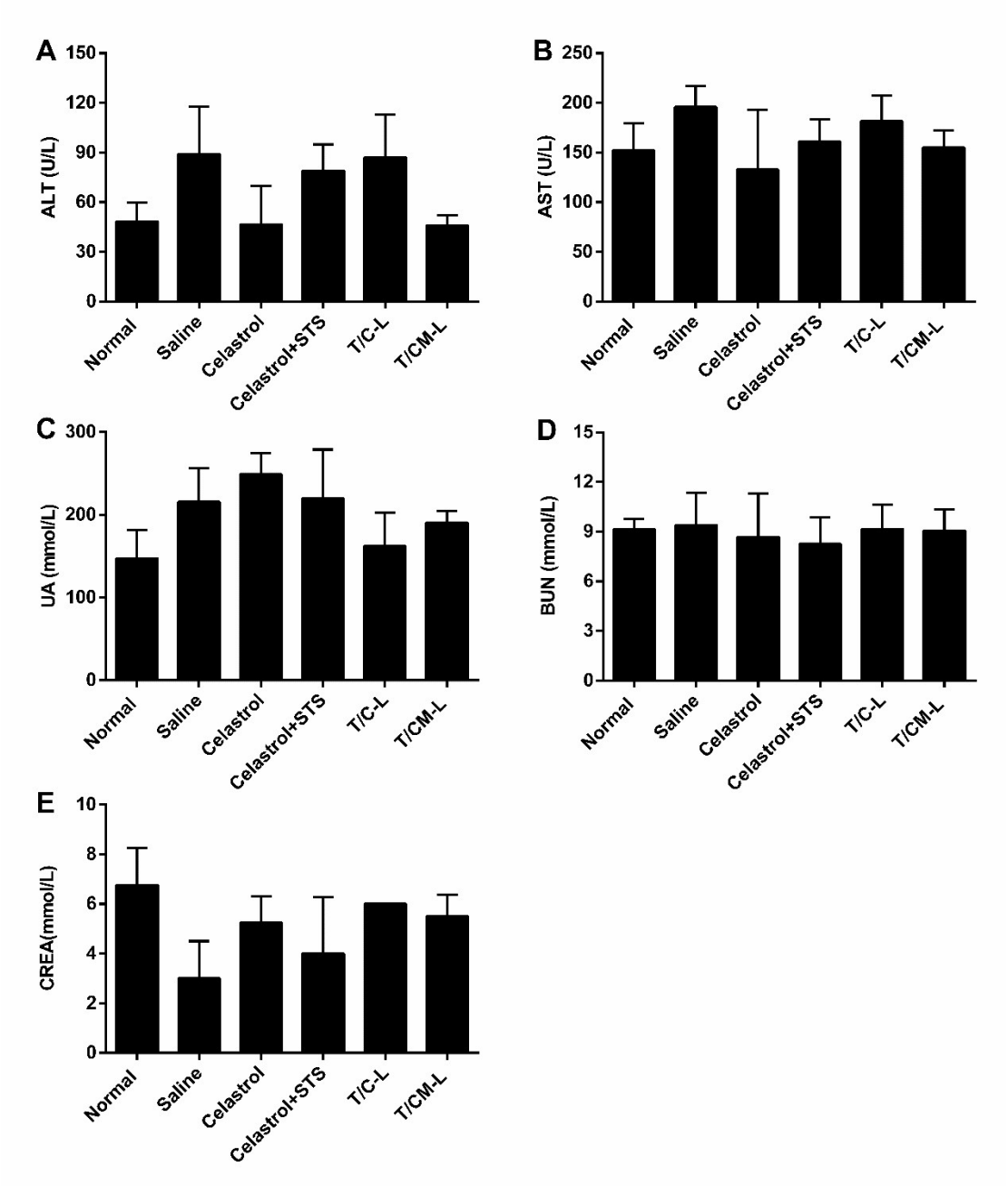

Fig. S5. Evaluation on the liver and kidney function. Serum level of (A) ALT, (B) AST, (C) UA, (D) BUN and (E) CREA of mice after 24 h of the last administration. Data are represented as mean ± SD; n = 6.