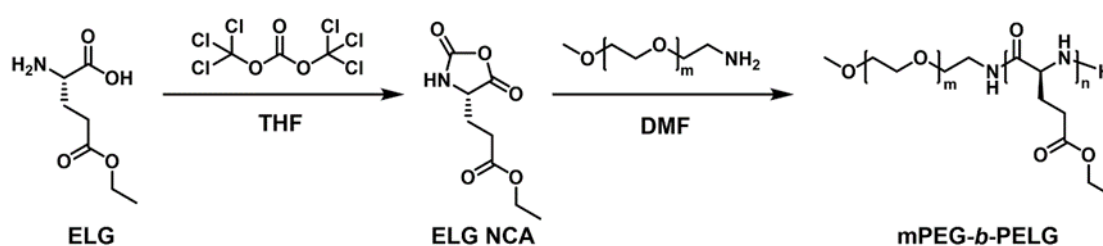


Supplementary Materials: Injectable Polypeptide Hydrogel Depots Containing Dual Immune Checkpoint Inhibitors and Doxorubicin for Improved Tumor Immunotherapy and Post-Surgical Tumor Treatment

Zhixiong Chen, Yan Rong, Junfeng Ding, Xueliang Cheng, Xuesi Chen and Chaoliang He



Scheme S1. Synthesis route for mPEG-PELG.

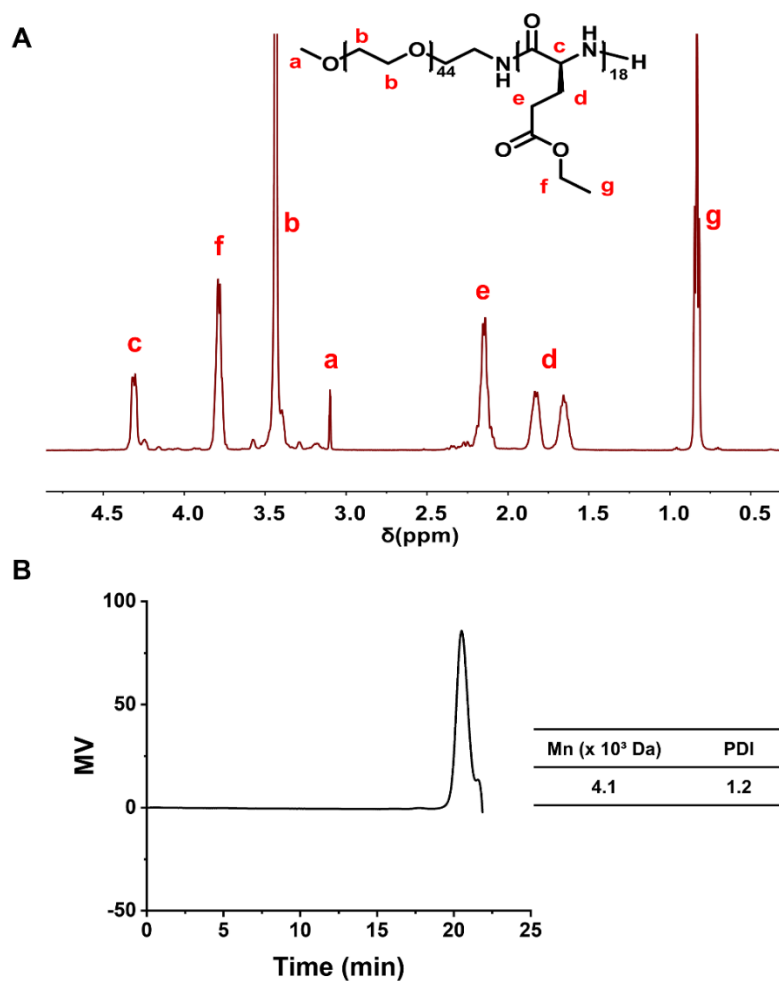


Figure S1. (A) ^1H NMR spectrum of mPEG-PELG in CF_3COOD . (B) GPC data of mPEG-PELG.

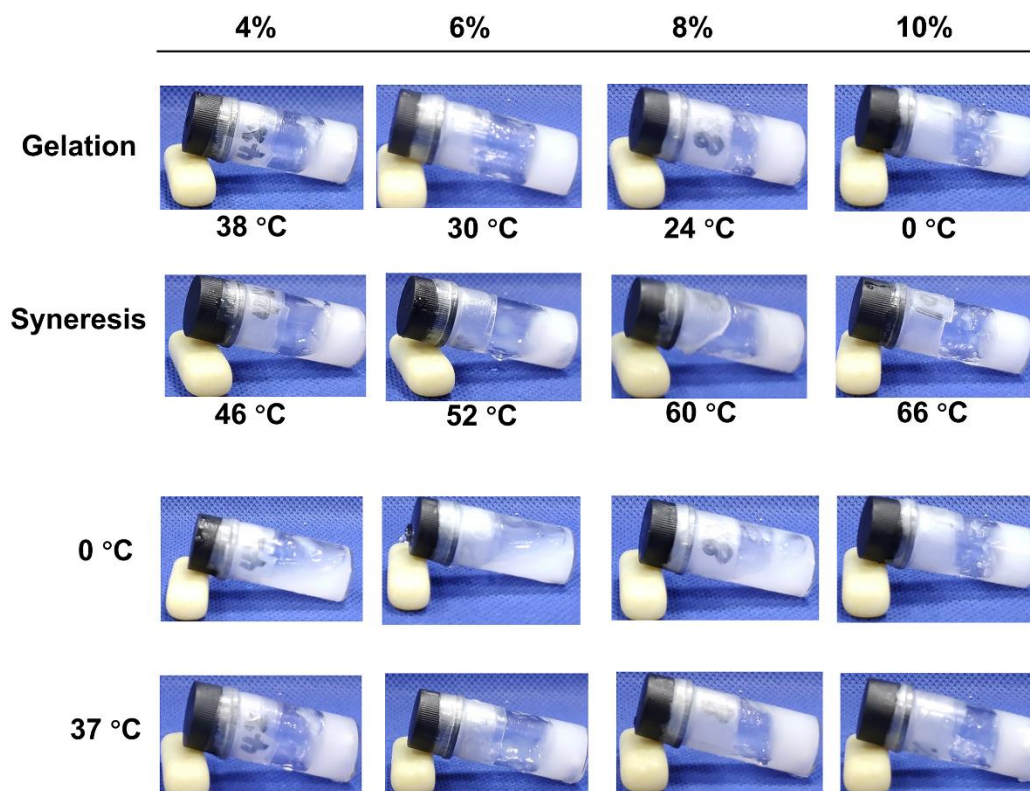


Figure S2. Photographs of the mPEG-PELG (4–10 wt%) at different temperatures. The gelation temperatures and syneresis temperatures were marked specially.

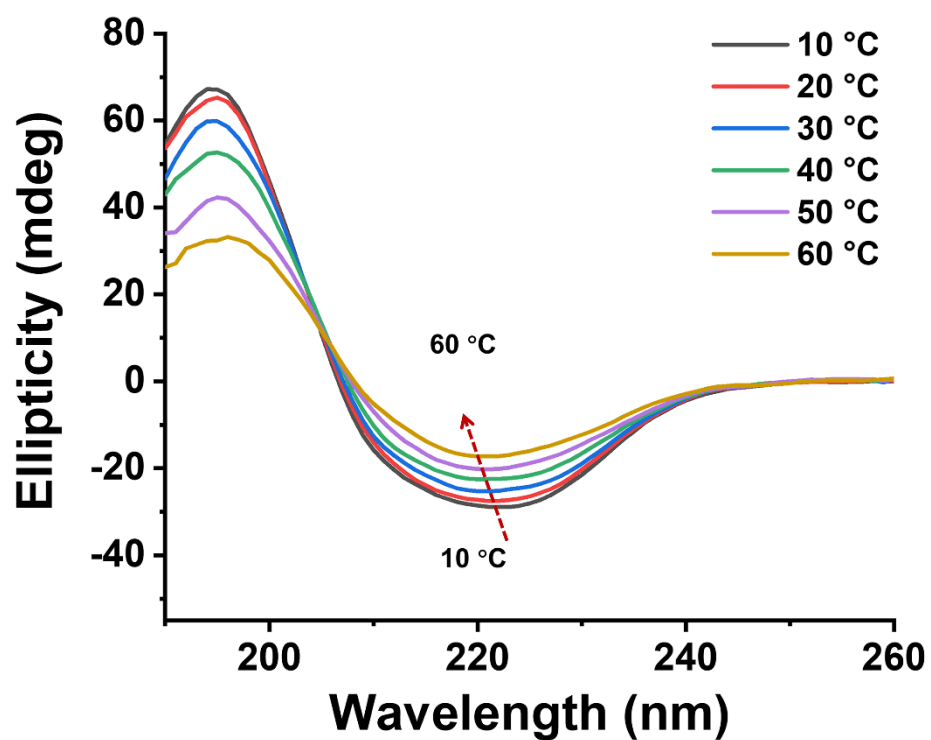


Figure S3. The ellipticity of polymer aqueous solution (0.05 wt%) with increasing temperature from 10 to 60 °C.

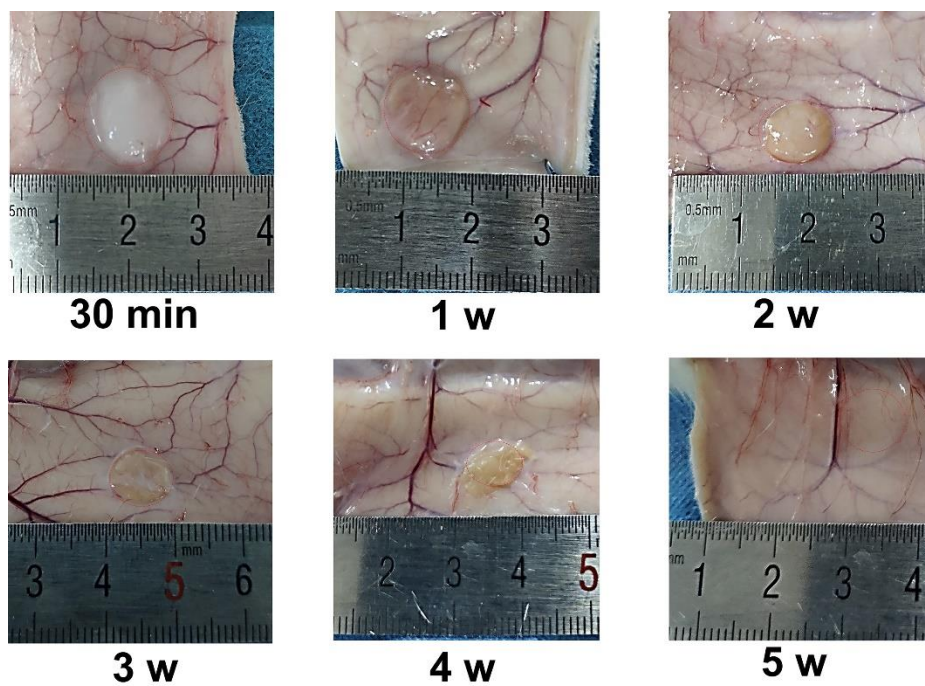
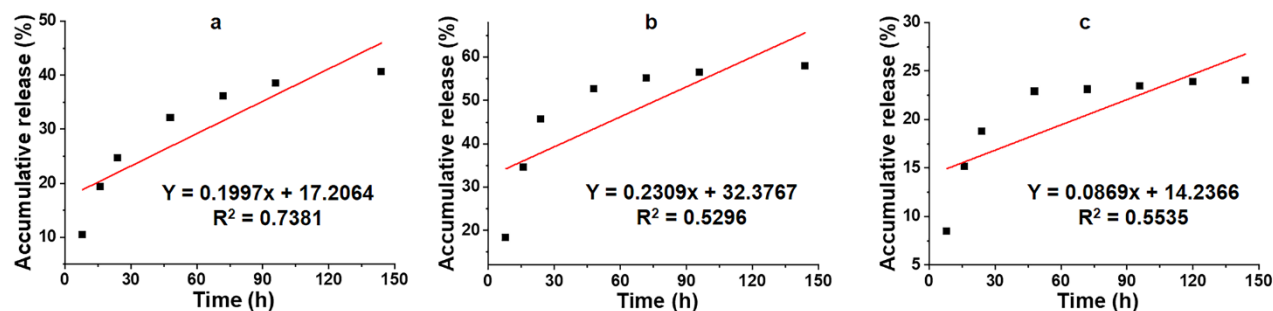
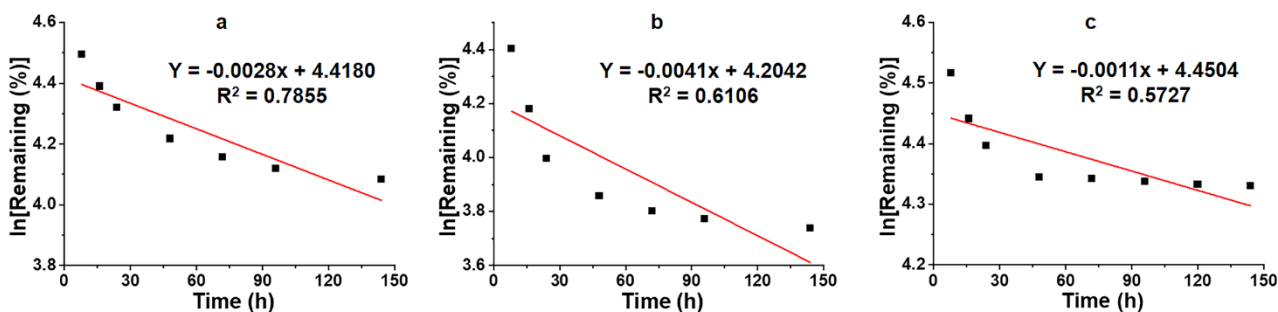


Figure S4. Photographs of the hydrogels after injection into the subcutaneous layer of rats at different time points.

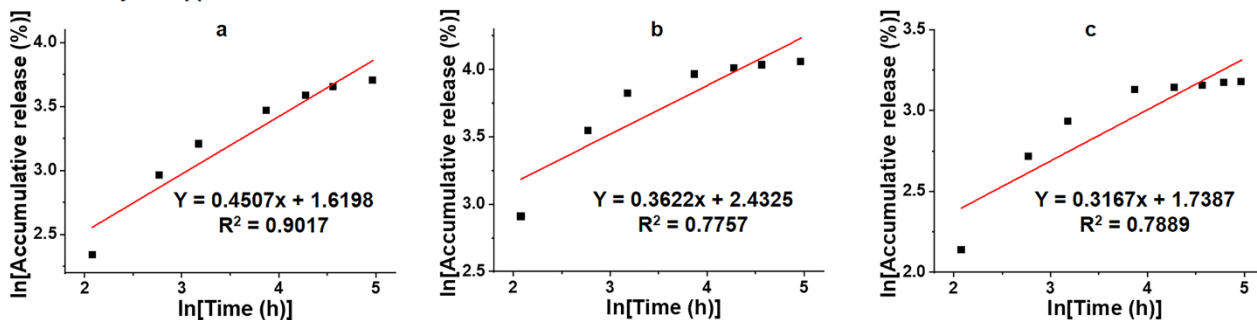
A Zero-order



B First-order



C Korsmeyer-Peppas



D Higuchi

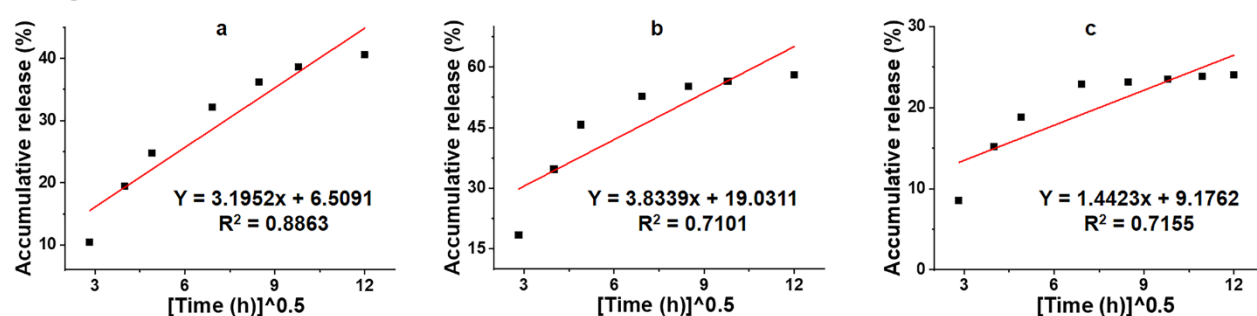


Figure S5. Fitting of the in vitro drug release data to kinetic models of zero-order model (A), first-order model (B), Korsmeyer-Peppas model (C) and Higuchi model (D) [43–45]. (a) Dox release from Dox-loaded hydrogel in PBS; (b) Dox release from Dox-loaded hydrogel in PBS containing proteinase K; (c) IgG release from IgG-loaded hydrogel in PBS.

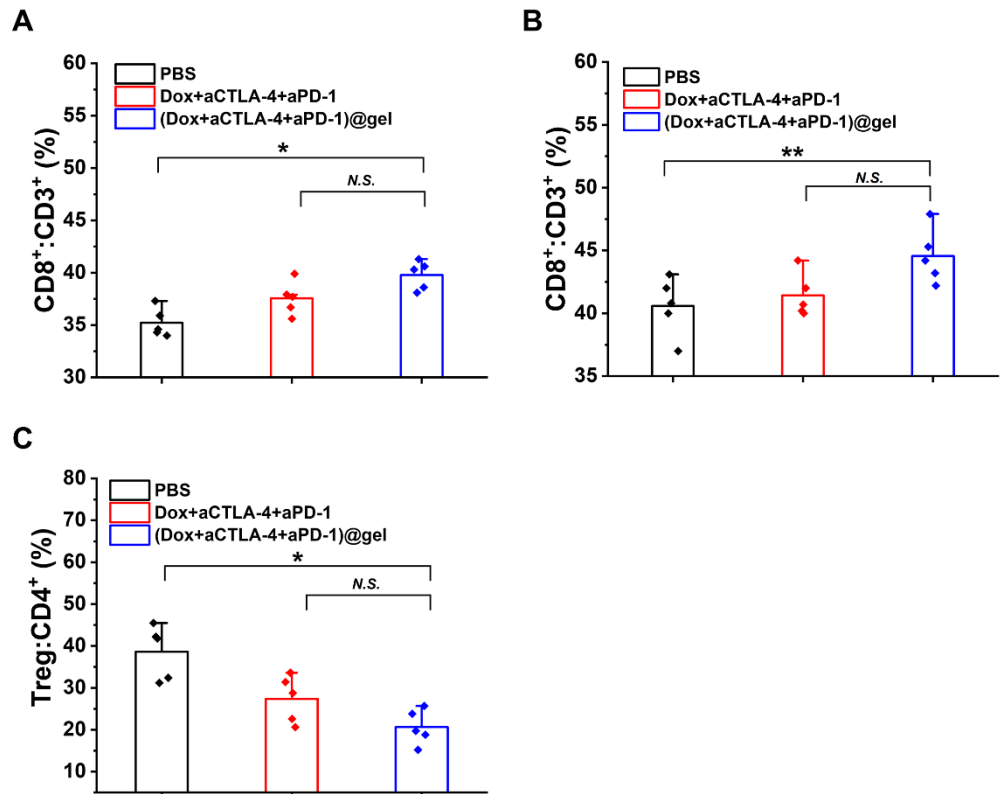


Figure S6. Immune cell analysis data of spleens, lymph nodes and tumors of the post-operative mice model after receiving various treatments, obtained by flow cytometry. (A) The ratio of CD8⁺:CD3⁺ in spleen (n = 5). (B) The ratio of CD8⁺:CD3⁺ in lymph nodes (n = 5). (C) The ratio of Tregs:CD4⁺ in tumor (n = 5).