Supporting information

Injectable hydrogels for the sustained delivery of a HER2-targeted antibody for preventing local relapse of HER2+ breast cancer after breast-conserving surgery

Xiaobin Chen^{1,†}, Maoli Wang^{2,†}, Xiaowei Yang¹, Yaoben Wang¹, Lin Yu^{1,*}, Jian Sun^{2,*} and Jiandong

Ding¹

 State Key Laboratory of Molecular Engineering of Polymers, Department of Macromolecular Science, Fudan University, Shanghai 200438, China

Department of Breast Surgery, Obstetrics and Gynecology Hospital, Fudan University, Shanghai
200011, China

[†] Authors contributed equally.

* Corresponding authors: yu_lin@fudan.edu.cn and surgian@163.com

Keywords: Injectable hydrogel; Breast-conserving surgery; Herceptin; Cardiotoxicity; Anti-relapse; Immunotherapy

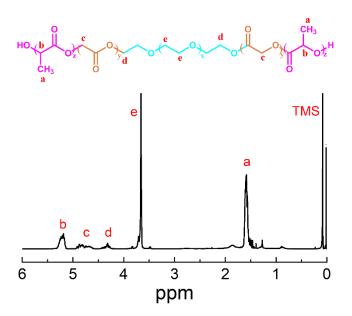


Figure S1. ¹H NMR spectrum of a PLGA-PEG-PLGA triblock copolymer (copolymer-2) in CDCl₃.

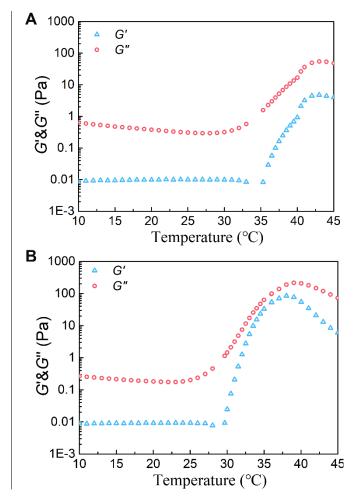


Figure S2. The storage modulus (G') and loss modulus (G'') of the aqueous solutions of (A) copolymer-2 and (B) mixture-C as a function of temperature. Shear frequency: 1.59 Hz; heating rate: 0.5 °C/min. The polymer concentration was 25 wt%.

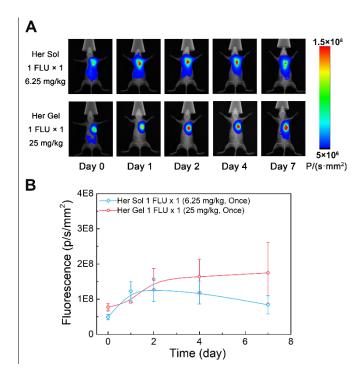


Figure S3. (A) Real-time *in vivo* fluorescent imaging of SK-BR-3 tumor-bearing nude mice with subcutaneous injection of Cy5.5-Her solution or the Cy5.5-Her-loaded mixture-A hydrogel. The fluorescence intensity of Cy5.5-Her in the hydrogel was equal to that of Cy5.5-Her solution. All the images shown in the same group are from the same mouse. (B) Semi-quantitative analysis of the fluorescence signals at the injection sites as a function of time.