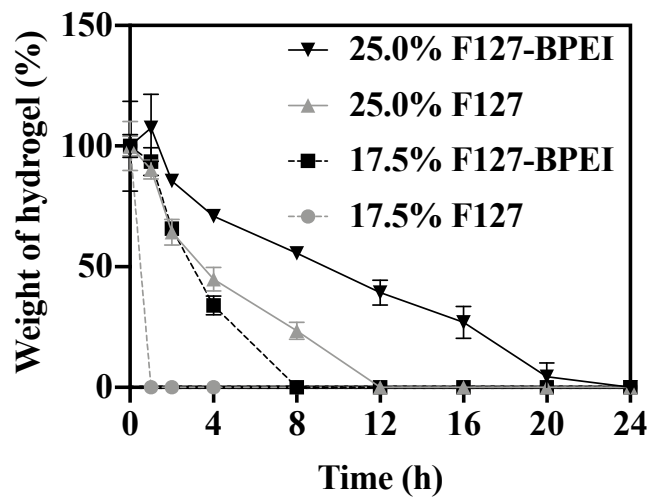


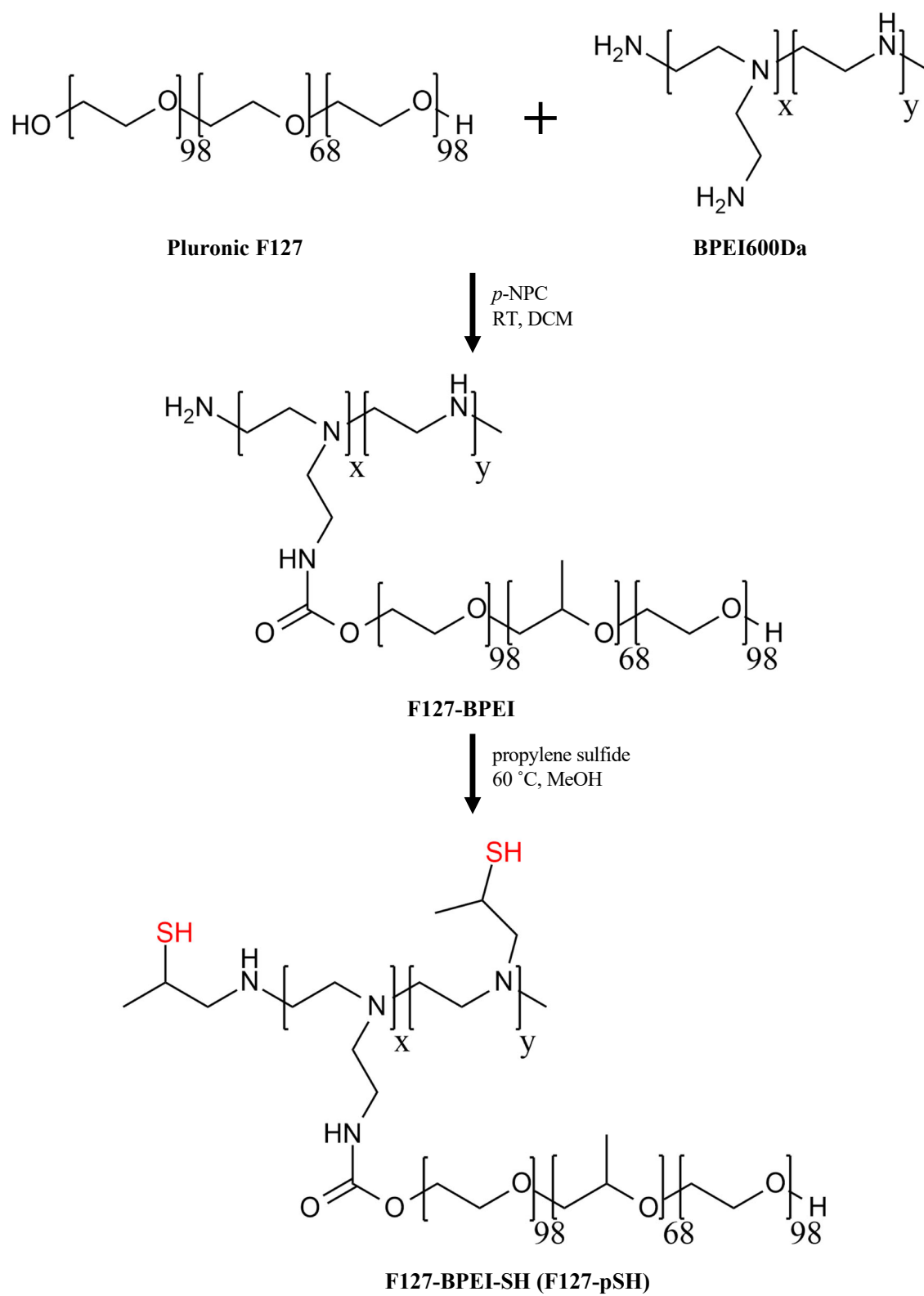
## Supplementary Materials

### Hydrogel Depot for Sustained Antibody Release Improves Immune Checkpoint Blockade Cancer Immunotherapy

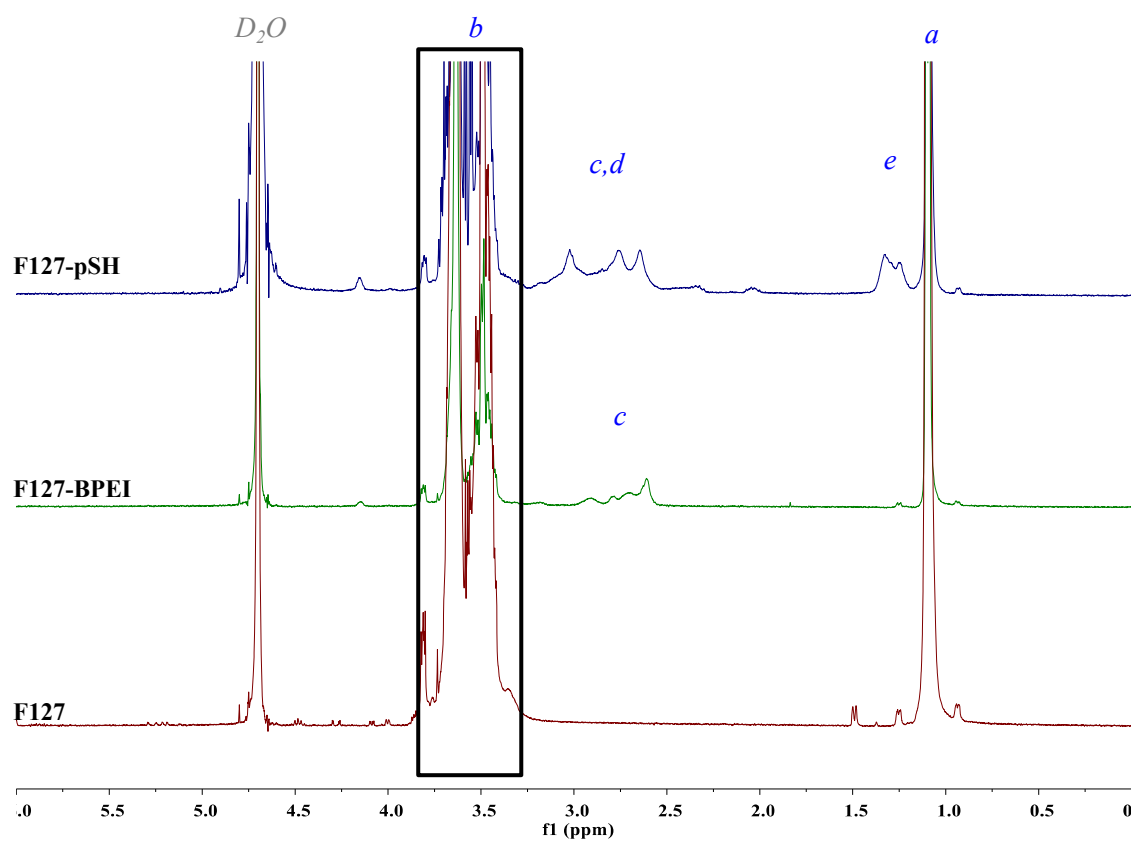
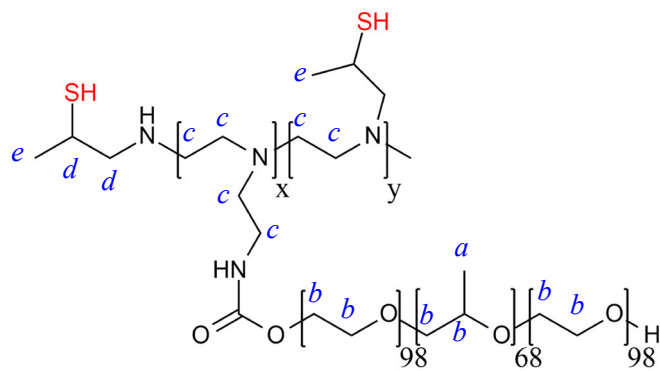
*Jihoon Kim, David M. Francis and Susan N. Thomas\**



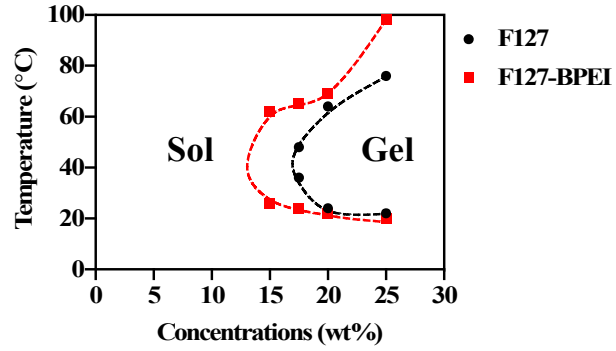
**Supplementary Figure S1.** Stability of F127 and F127-BPEI hydrogel in DMEM containing 10% FBS at 37 °C.



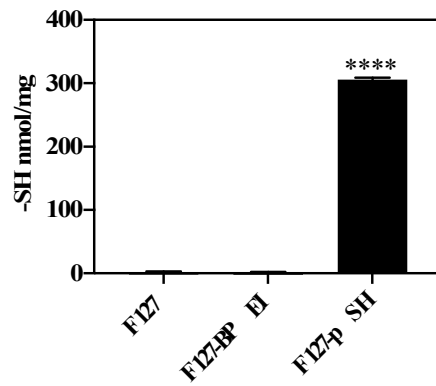
**Supplementary Figure S2.** Schematic of F127-pSH synthesis method.



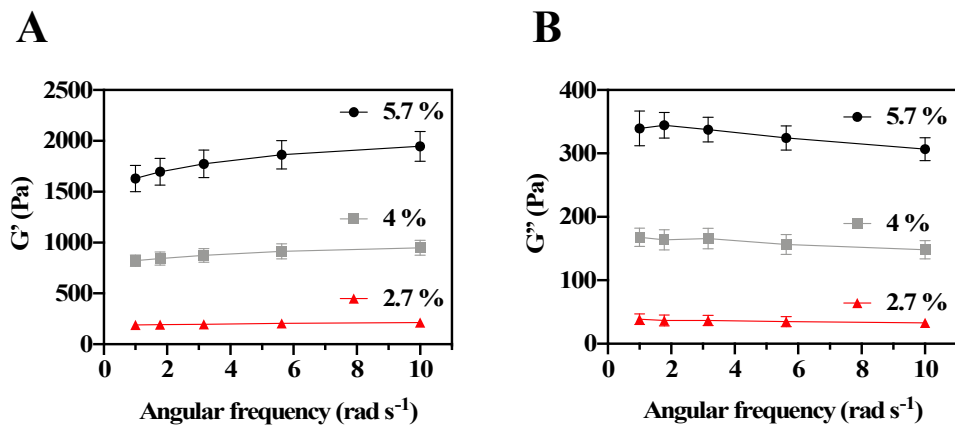
Supplementary Figure S3.  $^1\text{H}$  NMR of F127, F127-BPE, and F127-pSH in  $\text{D}_2\text{O}$ .



**Supplementary Figure S4.** Temperature- and concentration-dependent sol-gel transition of F127 and F127-BPEI.



**Supplementary Figure S5.** Quantification of weight density of polymer thiol groups in F127, F127-BPEI, and F127-pSH.



**Supplementary Figure S6.** Modulus of F127/PEG hydrogel at varying angular frequencies. (A) Storage modulus ( $G'$ ) of F127/PEG hydrogel at angular frequency 1-10  $\text{rad s}^{-1}$ . (B) Loss modulus ( $G''$ ) of F127/PEG hydrogel at angular frequencies of 1-10  $\text{rad s}^{-1}$ .

**Supplementary Table S1.** Sol-gel and gel-sol transition temperature of F127 and F127-BPEI.

%	Sol→gel transition temperature / Gel→seperation transition temperature	
	F127	F127-BPEI
1	Not available (N.A.)	N.A.
5	N.A.	N.A.
10	N.A.	N.A.
15	N.A.	26 °C / 62 °C
17.5	36 °C / 48 °C	24 °C / 65 °C
20	24 °C / 64 °C	22 °C / 69 °C
25	22 °C / 76 °C	20 °C / 98 °C