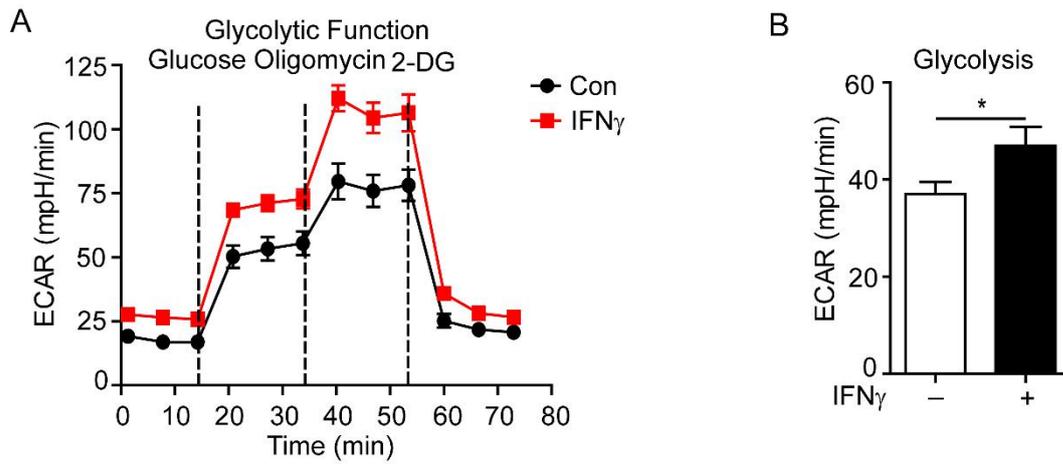


1 Supplemental Figures and Figure Legends

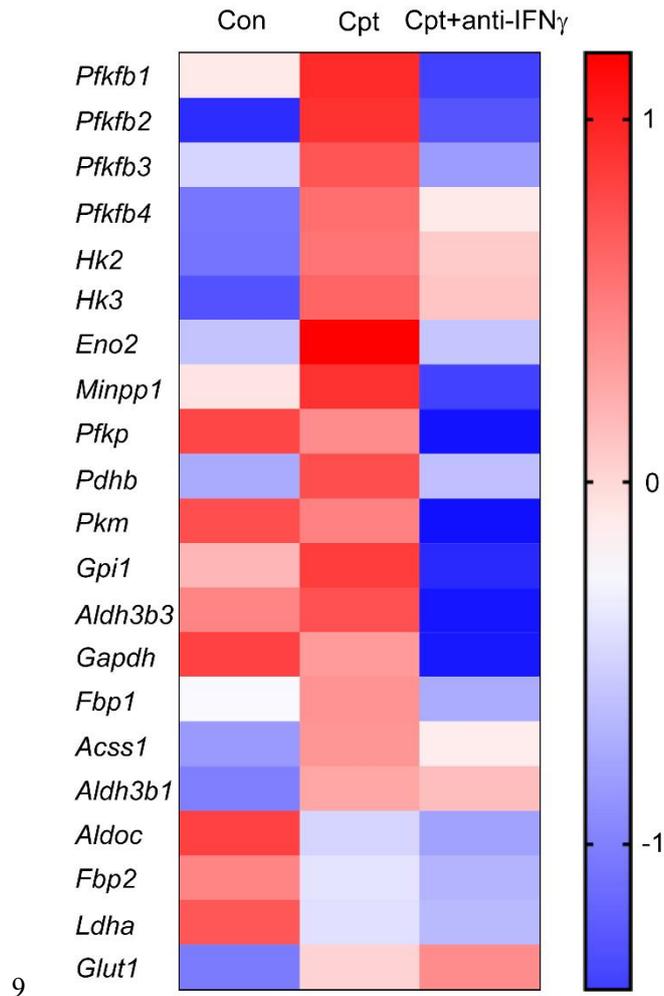


2

3 **Figure S1. IFN $\gamma$  enhanced glycolysis of HUVECs.** (A) Glycolysis of HUVECs  
4 (3000 cells per well) stimulated with IFN  $\gamma$  (30 ng/mL) . (B) Statistical analysis of  
5 glycolytic function of HUVECs with IFN  $\gamma$  stimulation. Statistical analyses using  
6 Nonparametric Mann-Whitney test. Values are mean  $\pm$  SEM. \*,  $p < 0.05$ ;

7

8



9

10 **Figure S2. Heatmap of transcript levels of genes in glycolysis.** The expressions of

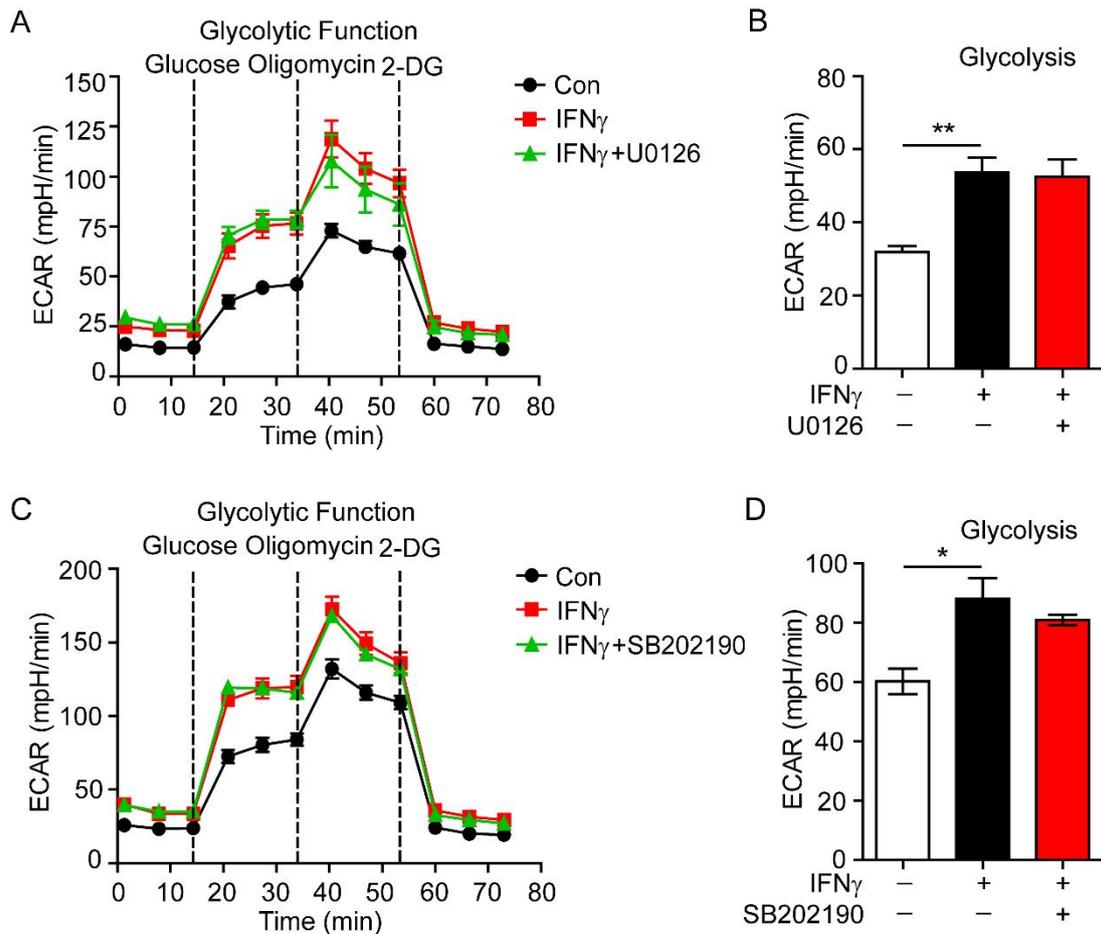
11 glycolysis-related genes of isolated tumour vascular endothelial cells from mouse

12 tumour tissues with indicated treatments. Statistical analyses using Z-score

13 normalization. N=3 for each group. Color scale: red, high expression; blue, low

14 expression.

15



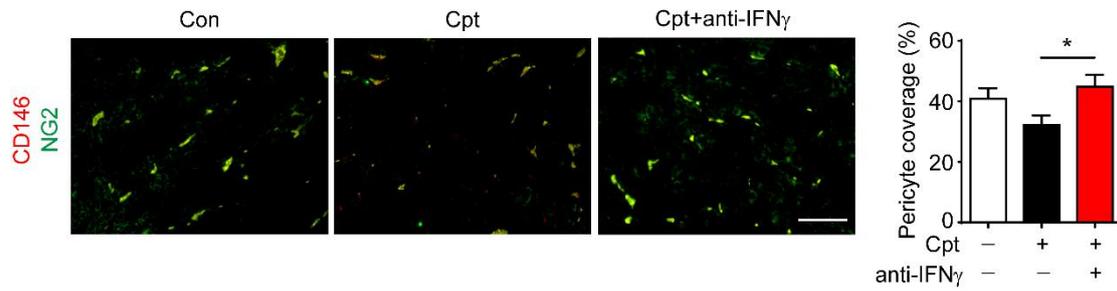
16

17 **Figure S3. Inhibition of ERK and P38 do not affect IFN $\gamma$ -stimulated glycolysis of**  
 18 **endothelial cells.** (A) Glycolysis of endothelial cells stimulated with IFN $\gamma$  or IFN $\gamma$   
 19 plus ERK inhibitor (U0126, 10  $\mu$ M). (B) Statistical analysis of glycolysis of  
 20 endothelial cells with treatment described as (A). Statistical analyses using  
 21 Nonparametric Mann-Whitney test. Values are mean  $\pm$  SEM. \*\*,  $p < 0.01$ ; (C)  
 22 Glycolysis of endothelial cells stimulated with IFN $\gamma$  or IFN $\gamma$  plus P38 inhibitor  
 23 (SB202190, 10  $\mu$ M). (D) Statistical analysis of glycolysis of endothelial cells with  
 24 treatment described as (C). Statistical analyses using Nonparametric Mann-Whitney  
 25 test. Values are mean  $\pm$  SEM. \*,  $p < 0.05$ .

26

27

28



29

30 **Figure S4. Neutralizing IFN $\gamma$  reversed cisplatin-reduced pericyte coverage.**

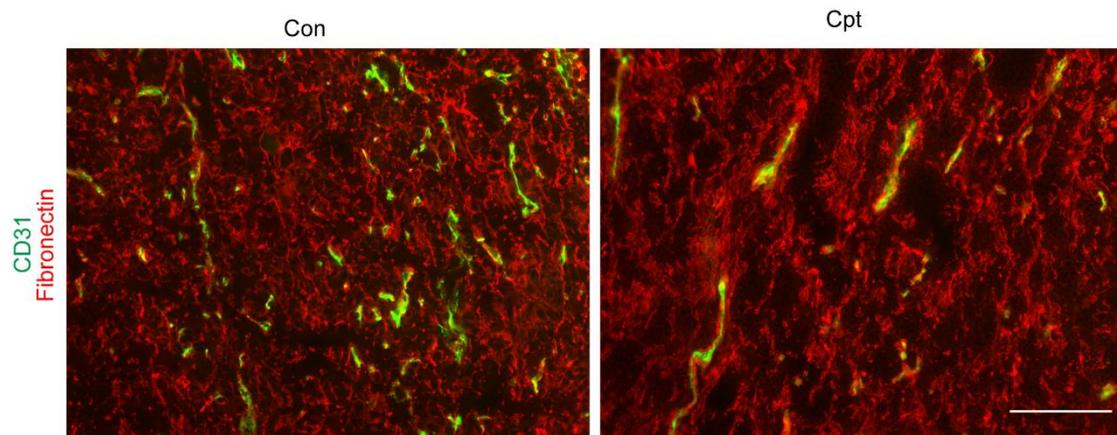
31 Representative images and quantifications of pericyte coverage in tumour tissues with

32 different treatments. Scale bar, 100  $\mu$ m. Nonparametric Mann-Whitney test. Values

33 are mean  $\pm$  SEM. \*,  $p < 0.05$ .

34

35



36

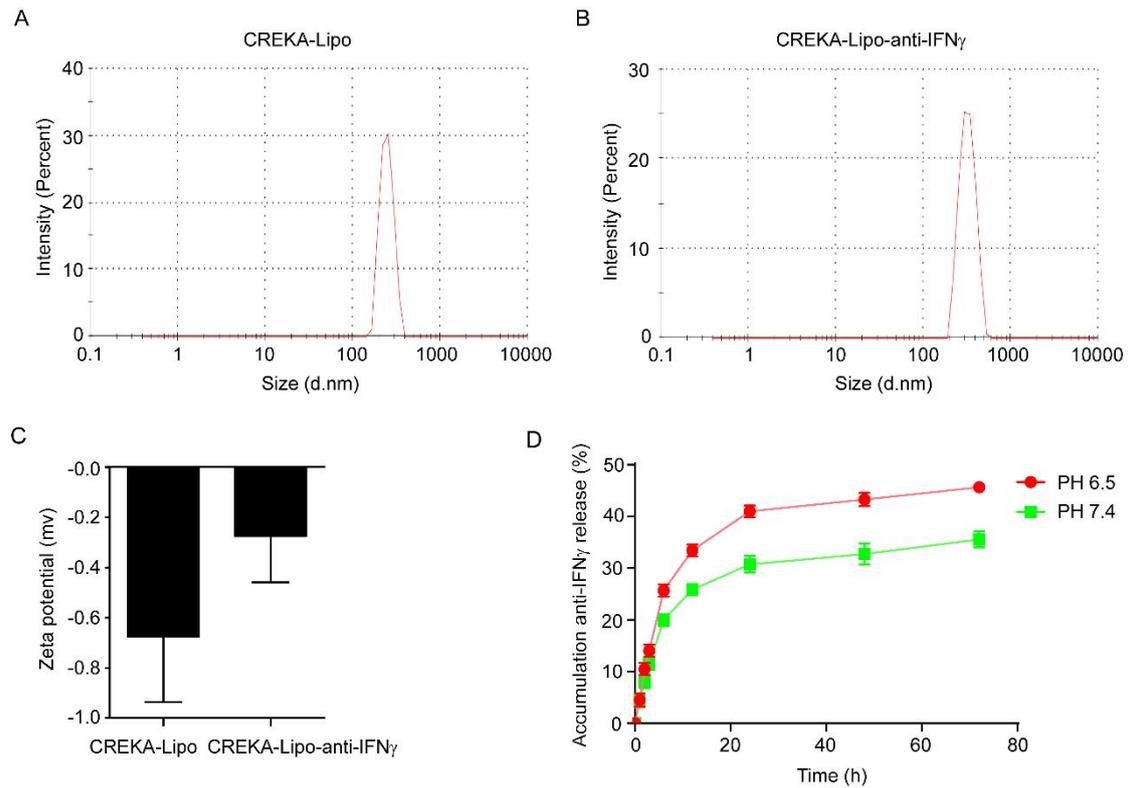
37 **Figure S5. Tumour blood vessels are enwrapped by fibronectin in LLC tumour**

38 **with cisplatin treatment.** Co-staining of CD31 and fibronectin in tumour sections

39 from control (Con) or cisplatin (Cpt) treated LLC tumours. Scale bar, 100  $\mu$ m.

40

41



42

43 **Figure S6. Characterization and release profiles of the CREKA-lipo-anti-IFN $\gamma$**

44 **nanoparticle. (A-C)** Size distribution and zeta potential characterization of

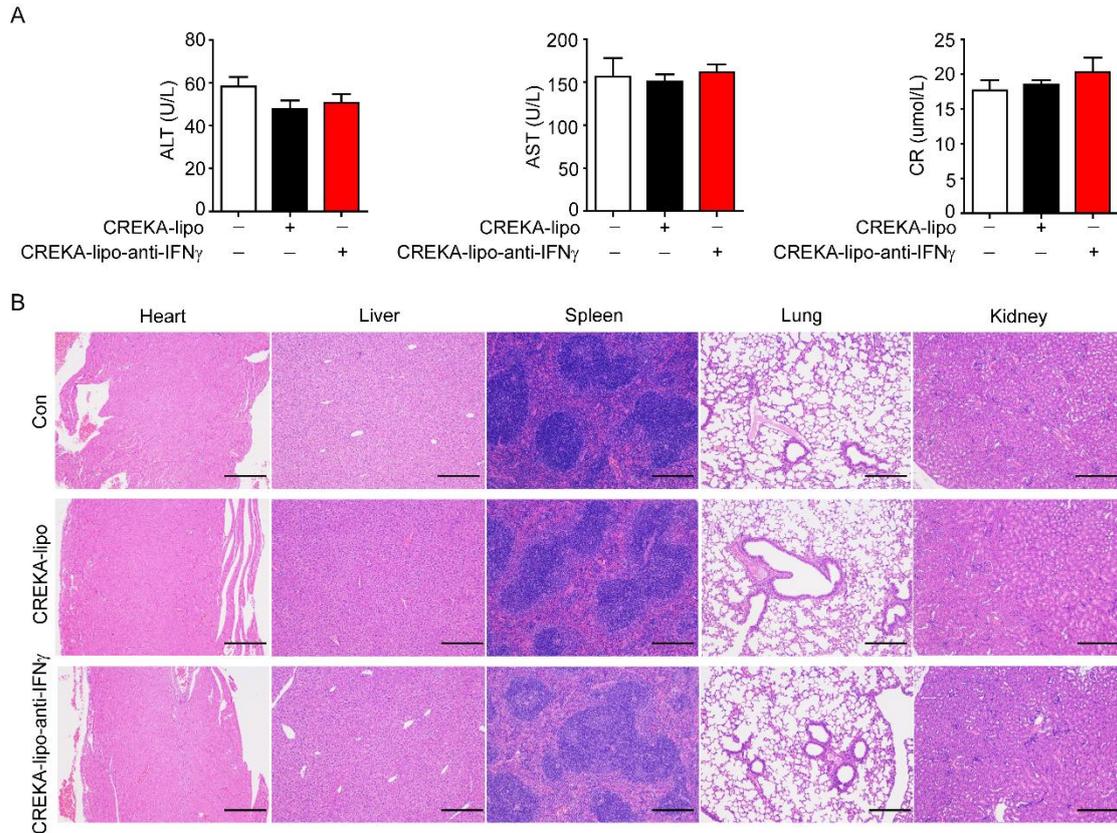
45 CREKA-lipo and CREKA-lipo-anti-IFN $\gamma$  at (Day 0) (n=3) in the PBS buffer at room

46 temperature. The data of zeta potential are presented as the mean  $\pm$  standard deviation

47 (n=3). **(D)** The drug release profiles of CREKA-Lipo-anti-IFN $\gamma$  at two pH conditions.

48 The data are presented as the mean  $\pm$  standard deviation (n=3).

49



50

51 **Figure S7. Evaluation of the biosafety of CREKA-lipo-anti-IFN $\gamma$  *in vivo*.** (A) The  
 52 effects of CREKA-lipo-anti-IFN $\gamma$  on the serum level of aspartate aminotransferase  
 53 (AST), alanine aminotransferase (ALT) related to liver function, and creatinine (CR)  
 54 related to kidney function. Statistical analyses using nonparametric Mann-Whitney  
 55 test (n = 5-6 for each group). (B) CREKA-lipo-anti-IFN $\gamma$  treatment showed no visible  
 56 damage to the major organs of mice as indicated by H&E staining (n = 3 for each  
 57 group). Scale bar, 200  $\mu$ m.

58