

Electronic Supplementary Information

On-Demand Responsive Nanoplatfom Mediated Targeting CAFs

and Down-Regulating mtROS-PYK2 Signaling

for Antitumor Metastasis

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34204049. Tell: +86-34204049.

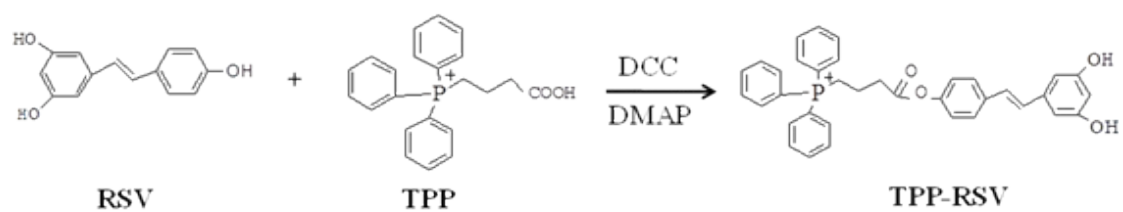


Figure S1 The equation of TPP-RSV synthesis

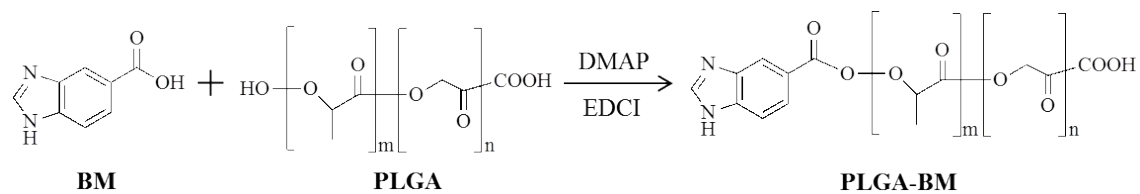


Figure S2 The equation of PLGA-BM synthesis

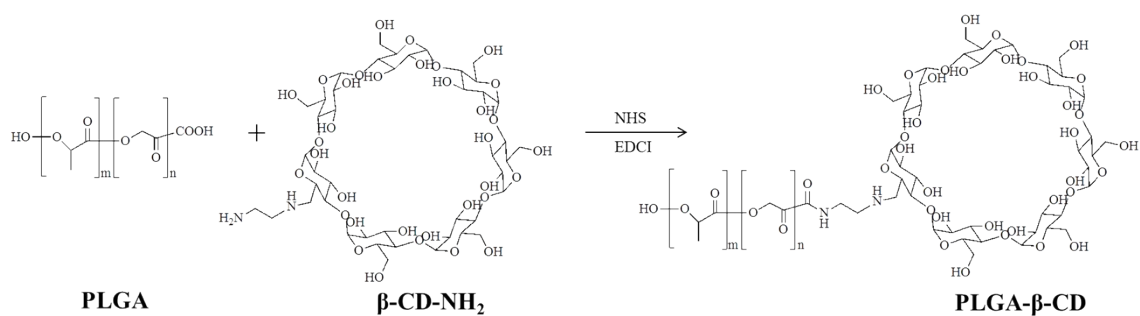


Figure S3 The equation of PLGA-β-CD synthesis

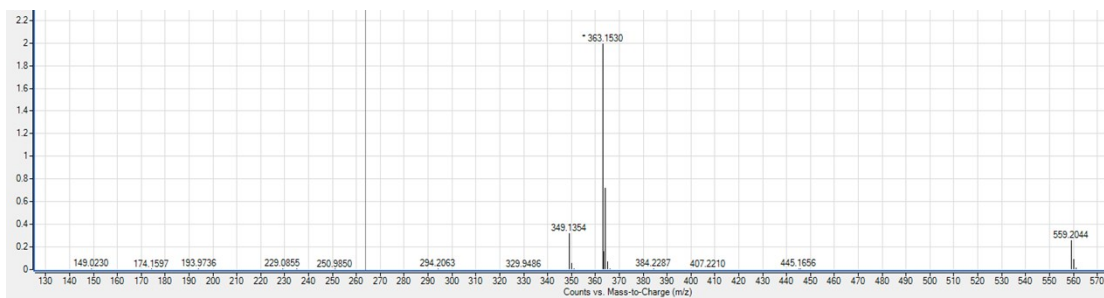


Figure S4 ESI-MS spectrum of TPP-RSV prodrug

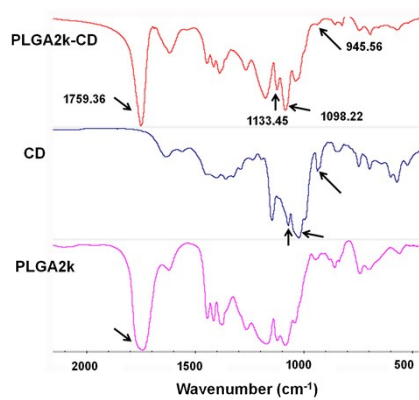


Figure S5 FTIR spectrum of PLGA_{2k}-CD polymer.

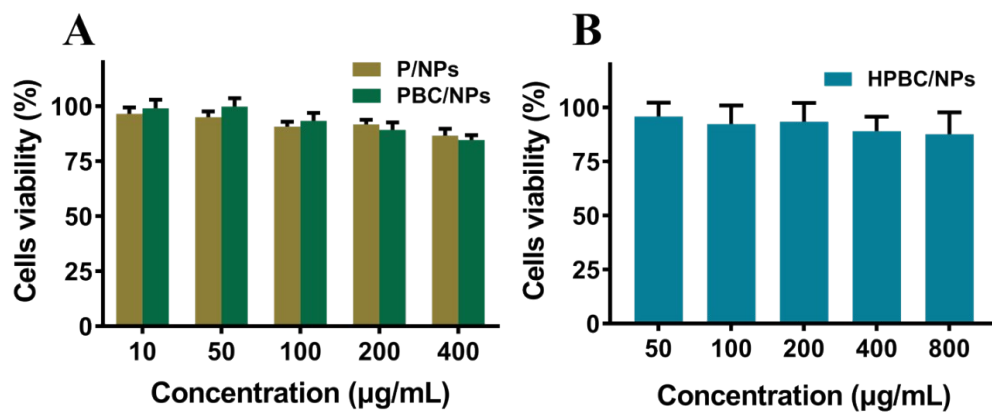


Figure S6 Cytotoxicity of blank P/NPs, blank PBC/NPs and blank HPBC/NPs were estimated by MTT method at various concentrations.

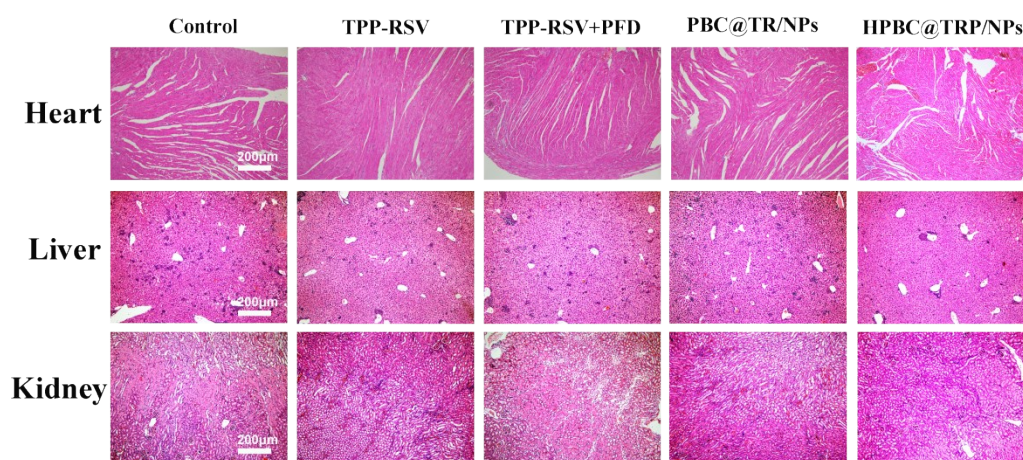


Figure S7 H&E staining images of heart, liver and kidneys of 4T1/NIH3T3 tumor bearing mice. Scale bar: 200 µm.

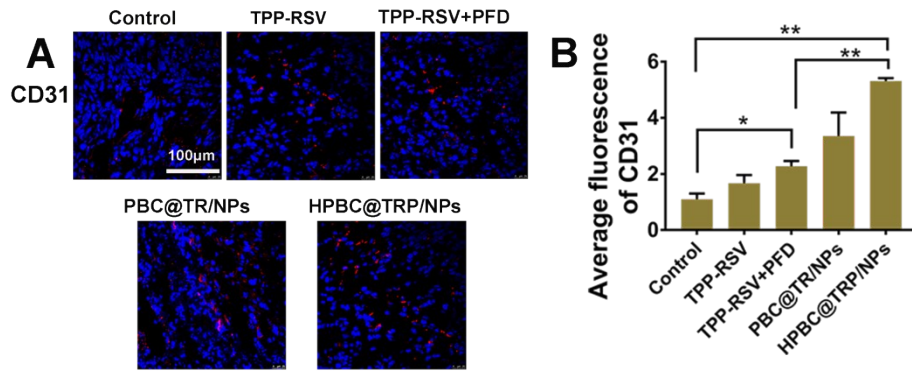


Figure S8 The vascular normalization in tumors. (A) CLSM images of immunofluorescence staining of tumor vessels (anti-CD31 staining) at the end point of treatments. (B) Quantitative analysis of tumor vessels (CD31⁺) in tumor tissue by Image J software. *P < 0.05, ** P < 0.01.

Table S1 The characterization of P@TR/NPs, PBC@TR/NPs and HPBC@TRP/NPs formulations, including particle size and Zeta potential.

Data are given as mean \pm SD (n = 3).

	P@TR/NPs	PBC@TR/NPs	HPBC@TRP/NPs
Size (nm)	146.2 \pm 8.4	150.7 \pm 2.3	162.4 \pm 3.9
PDI	0.111 \pm 0.037	0.109 \pm 0.018	0.124 \pm 0.001
Zeta (mV)	52.8 \pm 5.2	49.2 \pm 2.1	-35.7 \pm 0.4

Table S2 The EE% and DL% analysis of prodrug TPP-RSV and PFD in various formulations. Data are given as mean \pm SD (n = 3).

	P@TR/NPs	PBC@TR/NPs	HPBC@TRP/NPs	
TPP-RSV	EE%	75.92 \pm 1.32	73.92 \pm 3.96	86.42 \pm 2.53
	DL%	5.32 \pm 0.09	5.18 \pm 0.28	4.16 \pm 0.12
PFD	EE%	—	—	63.72 \pm 1.03
	DL%	—	—	6.14 \pm 0.10

Table S3 The evaluation of IC₅₀ for 4T1 cells after RSV, TPP-RSV, P@TR/NPs,

PBC@TR/NPs and HPBC@TRP/NPs treatments.

Data are given as mean \pm SD (n = 3).

Mean \pm SD	RSV	TPP-RSV	P@TR/NPs	PBC@TR/NPs	HPBC@TR/NPs
IC ₅₀ (nmol/mL)	108.40 \pm 6.65	31.73 \pm 1.23	60.62 \pm 1.73	45.83 \pm 1.3	38.49 \pm 1.10