Supporting Information

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25 Fig S1. The BET test result of BSA@PB/Cur.



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Fig S2. Stability of BSA@PB and BSA@PB/Cur during storage. Data are expressed as mean \pm SD (n = 3).





30 Fig S3. Temperature profiles of different concentrations of BSA@PB/Cur. Data are 31 expressed as mean \pm SD (n = 3).



33 Fig S4. Temperature change of BSA@PB/Cur (200 μ g/mL) under 808 nm laser 34 irradiation at a power density of 1 W/cm² for 4 cycles.



36 Fig S5. Live/dead double staining of Cur, BSA@PB and BSA@PB/Cur after incubation

37 of macrophages. Scale bar = $100 \mu m$.



- 38
- 39 Fig S6. Toxicity of BSA@PB/Cur (200 µg/mL) to macrophages under light and no light.
- 40 Data are expressed as mean \pm SD (n = 3). *P < 0.05, **P < 0.01, ***P < 0.001, ****P < 0.00
- 41 0.0001.



43 Fig S7. Haemolysis of Cur, BSA@PB and BSA@PB/Cur cells at different concentrations.



45 Fig S8. Representative H&E staining images of Heart, Spleen and Lung of ApoE^{-/-} mice

46 after different treatments. Scale bar = $100 \ \mu m$.



48 Fig S9. Serum levels of (A) ALT and (B) AST in ApoE^{-/-} mice after treatment with 49 different formulations. Data are expressed as mean \pm SD (n = 3). *P < 0.05, **P < 0.01, 50 ***P < 0.001, ****P < 0.0001.



- 53 Fig S10. Cellular uptake ratio of DID and BSA@PB/DID by LPS-activated or non-
- 54 activated macrophages. Data are expressed as mean \pm SD (n = 3). *P < 0.05, **P < 0.01,





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57 Fig S11. Fluorescence images of LPS activated macrophages incubated with DCFH-DA 58 after treatment with different formulations. Scale bar = 100 μ m. *P < 0.05, **P < 0.01, 59 ***P < 0.001, ****P < 0.0001.





62 H₂O₂.



64 Fig S13. The mRNA level of interleukin 10 (IL-10) in LPS-activated macrophages 65 treated with different preparations (200 μ g/mL). Data are expressed as mean \pm SD (n = 3). 66 *P < 0.05, **P < 0.01, ***P < 0.001, ****P < 0.0001.



68 Fig S14. PCR to detect (A) NF-κB1 and (B) NF-κB2 relative mRNA expression in LPS-69 activated macrophages treated with BSA@PB (200 µg/mL). Data are expressed as mean 70 \pm SD (n = 3). *P < 0.05, **P < 0.01, ***P < 0.001, ****P < 0.0001.



Fig S15. (A) Caspase-3 and (B) Bcl-2 relative mRNA expression after BSA@PB/Cur without or with 808 nm laser irradiation for 2 min (1 W/cm²). Data are expressed as mean $4 \pm SD$ (n = 3).



76 Fig S16. Photothermal images of the aortic site under 808 nm irradiation after injection of

77 different formulations (1 W/cm², 2 min).



Fig S17. Serum expression levels of (A) triglycerides (TG), (B) total cholesterol (CHO), (C) low-density lipoprotein (LDL-C) and (D) high-density lipoprotein (HDL-C) after treatment with different formulations. Data are expressed as mean \pm SD (n = 3). *P <



82 0.05, **P < 0.01, ***P < 0.001, ****P < 0.0001.

84 Fig S18. Representative images of whole aorta oil red O staining in atherosclerotic mice

85 after treatment with different formulations.

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88 Table S1. Primer sequence for reverse transcription-quantitative PCR.

Gene	Forward Primer (5' to 3')	Reverse Primer (5' to 3')		
NF-ĸB1	ATGGCAGACGATGATCCC	TGTTGACAGTGGTATTTCT		
	TAC	GGTG		
NF-ĸB2	GGCCGGAAGACCTATCCT	CTACAGACACAGCGCACAC		
	ACT	Т		
TNF-α	CTGAACTTCGGGGGTGATCG	GGCTTGTCACTCGAATTTT		
	G	GAGA		
IL-1β	CTGTGACTCATGGGATGAT	CGGAGCCTGTAGTGCAGTT		
	GATG	G		
IL-10	GCTCTTACTGACTGGCATG	CGCAGCTCTAGGAGCATGT		
	AG	G		
ABCA1	AACAACCCCTGCTTCCGTT	GGCGAGACACGATGGACTT		
	AT	G		
ABCG1	TCCTACTCTGTACCCGAGG	CGGGGCATTCCATTGATAA		
	G	GG		
Caspase-3	CTCGCTCTGGTACGGATGTG	TCCCATAAATGACCCCTTCAT		
		CA		
Bcl-2	GAGAGCGTCAACAGGGAGA	CCAGCCTCCGTTATCCTGGA		
	TG			
GAPDHF	AGGTCGGTGTGAACGGAT	GGGGTCGTTGATGGCAACA		
	TTG			

90 Table S2. XPS of BSA@PB/Cur surfaces (elemental composition and content).

Name	Peak BE	FWHM (eV)	Area (P)	Atomic (%)
			CPS.eV	

Fe2p	709.04	0.82	403.3	0.17
Ols	531.99	2.33	12595.97	17.42
N1s	400.09	1.65	5974.76	13.53
K2p	293.42	1.36	3142.5	2.47
C1s	285	2.34	18143.16	66.41