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Supporting information

Synergic modulation of inflammatory state of macrophages utilizing anti-oxidant and phosphatidylserine containing polymer-lipid hybrid nanoparticles

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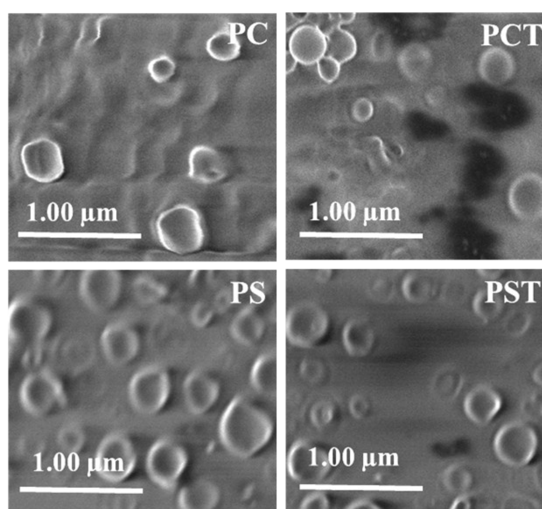

Fig. S1. Scanning electron microscopic images of the PLNPs.

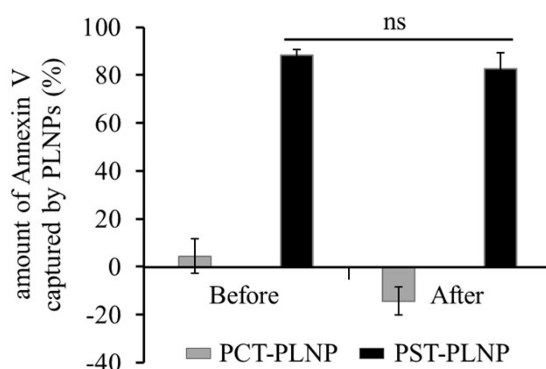

Fig. S2. Effect of acid treatment of PLNPs on their binding capacity against PS-specific Annexin V.

Methods

Effect of acid treatment of PLNPs on binding capacity against Annexin V

PLNPs (10 mg/mL) were treated with HCl-KCl solution (pH 1.2) with shaking for 4 h at 37°C. After neutralization with phosphate buffer to pH 7.0, PLNPs were collected by centrifugation at 13000 g followed by washing with MilliQ water for 3 times. PLNPs were dispersed in 160−μL of binding buffer (50 mM HEPES containing 750 mM NaCl, 25 mM KCl, 5 mM $MgCl_2$, and 9 mM $CaCl_2$ (pH7.4)). To the dispersion, 10-μL of aqueous solution of FITC-Annexin V (1 μM) was added and then incubated for 30 min at room temperature. Then, PLNPs were precipitated by centrifugation at 13000 g for 15 min. A fluorescence resulting from remaining FITC-Annexin V in the supernatant was measured by microplate reader.

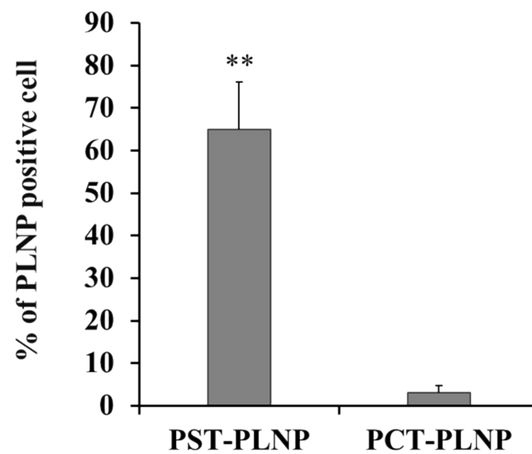

Fig. S3. Quantification of cellular uptake of PLNPs by image-based cytometer (**, $p < 0.01$).