Supplemental Materials

Therapeutic effects of Tea Polyphenols loaded nanoparticles coated with platelet membranes on LPS-induced lung injury

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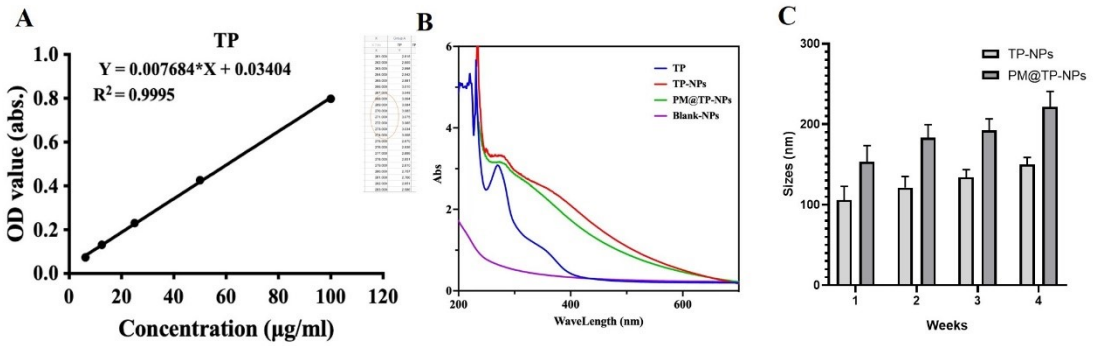

Figure S1 The assay of TP loading onto TP-NPs. (A) The standard curve of tea polyphenol (TP) at 220 nm. The UV absorbance peak is at ~270 nm. **(B)** The UV-vis spectrum of free TP, TP-NPs and PM@TP-NPs indicated that TP was successfully encapsulated in TP-NPs and PM@TP-NPs, which were shown by the similar absorption peaks at around 220 nm. (C) The diameters of the two kinds of TP-NPs did not change significantly for up to 4 weeks of storage at 4℃.

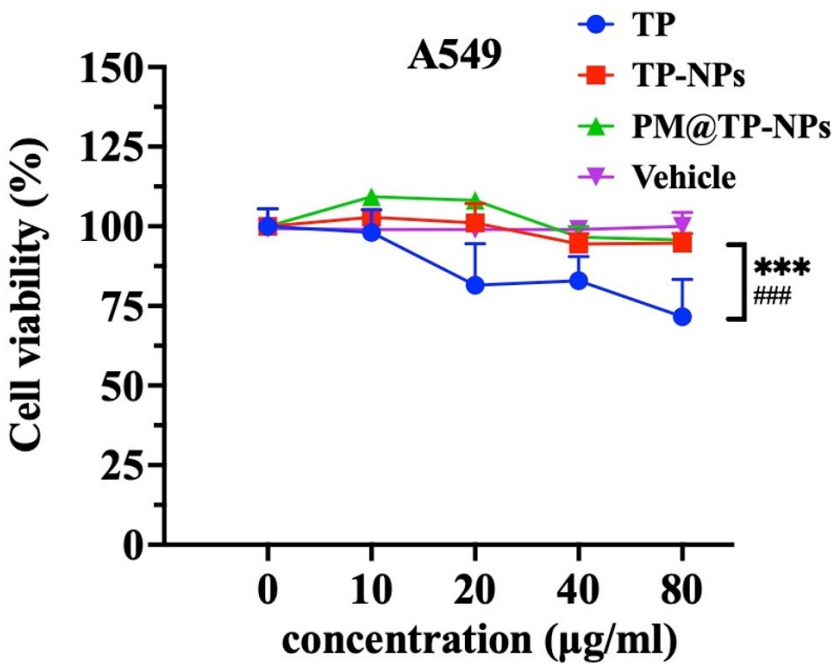

Figure S2 Effect of TP on the cell viability of A549 cells. A549 cells were incubated for 24 h in the presence of free TP or TP-NPs (final concentration 10, 20, 40, 80 μg/ml). The cell viability was assayed by Cell Counting Kit-8 (CCK-8). The results showed that TP or TP-NPs would not induce cytotoxicity in A549 cells at low concentration (<40ug/ml). Notably, high concentration (80 μg/ml) of TP could induce growth inhibition on cells, however, the same concentration of TP-NPs had no toxic effects on cells. It implied that nanoparticle-formulation could effectively decrease the cytotoxicity induced by high dose of TP. (**** $p < 0.001$)

A549 cells were provided by the Cell Library of Guangdong Provincial Key Laboratory of Medical Molecular Diagnostics, Guangdong Medical University. A549 cells were cultured in DMEM (Gibco) with 10% fetal bovine serum (Gibco) containing 100 μg/ml streptomycin and 100 IU/ml penicillin at 5% CO_2 and 37 °C.