Supporting information

Enhanced cancer therapy through synergetic photodynamic/immune checkpoint blockade mediated by a liposomal conjugate comprised of porphyrin and IDO inhibitor

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Scheme S1. Synthesis of the conjugate PpIX-NLG.



Figure S1. ESI - High resolution mass spectra (HRMS) of PpIX-NLG.



Figure S2. FTIR spectra of PpIX, NLG919 and PpIX-NLG.



Figure S3. Stability of PpIX-NLG@Lipo in PBS buffer with 10% FBS at 37°C.



Figure S4. The detection of ROS generation using DPBF as ROS indicator in DMSO. The UV-vis spectra changes of DPBF (A), DPBF and PpIX mixture (B), DPBF and PpIX-NLG mixture (C) at different time under LED light irradiation (630 nm, 20 mW/cm²). (D) The decrement curve of absorbance at 416 nm of DPBF, PpIX and PpIX-NLG under LED light irradiation (630 nm, 20 mW/cm²).



Figure S5. The detection of ROS generation from the prepared liposomes using ABDA as ROS indicator in the aqueous solution. The UV-vis spectra changes of ABDA (A), ABDA and PpIX@Lipo mixture (B), ABDA and PpIX-NLG@Lipo mixture (C) at different time under laser irradiation (630 nm, 50 mW/cm²).



Figure S6. After different treatments in the bilateral 4T1 tumor-bearing mice, distant tumor was removed, CD8⁺ T cells infiltration in the distant tumors detected by FCM (A) and IHC (B) to determine the immune response in vivo.