

Supporting Information for :

**Light-Responsive Biodegradable Nanomedicine Overcomes
Multidrug Resistance *via* NO-Enhanced Chemosensitization**

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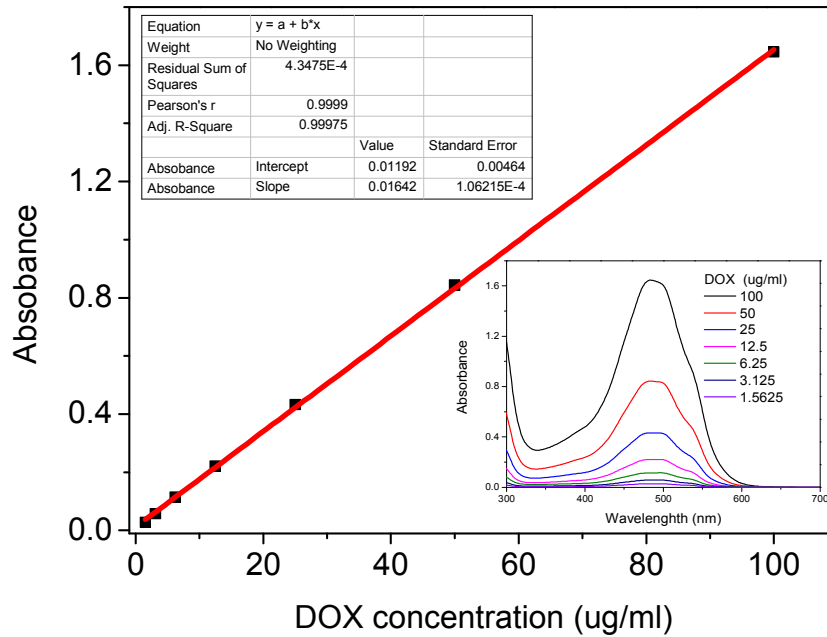


Fig. S1 DOX standard curve. Different concentrations of doxorubicin (from 1.56 to 100 $\mu\text{g}/\text{mL}$) in pH 7.4 PBS were detected by UV-Vis to establish a standard curve.

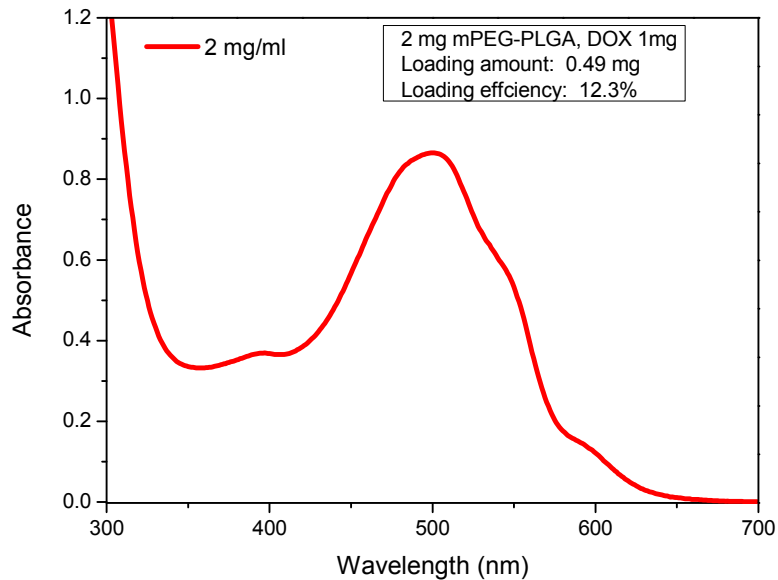


Fig. S2 UV-Vis spectrum of mPEG-PLGA-BNN6-DOX. The supernatant was collected and measured to calculate the loading amount and efficiency of DOX.

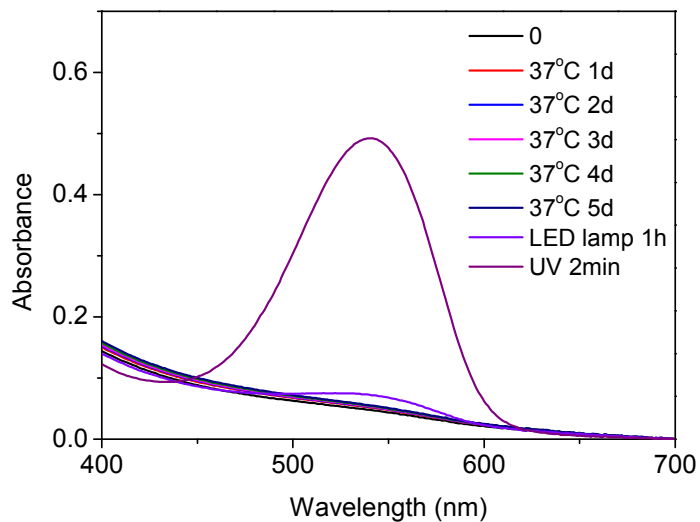


Fig. S3 Griess assay detection of the NO release of mPEG-PLGA-BNN6: PBS solution at 37 °C dark environment for up to 5 days, 365 nm UV irradiation for 2 min, or LED lamp irradiation for 1 h.

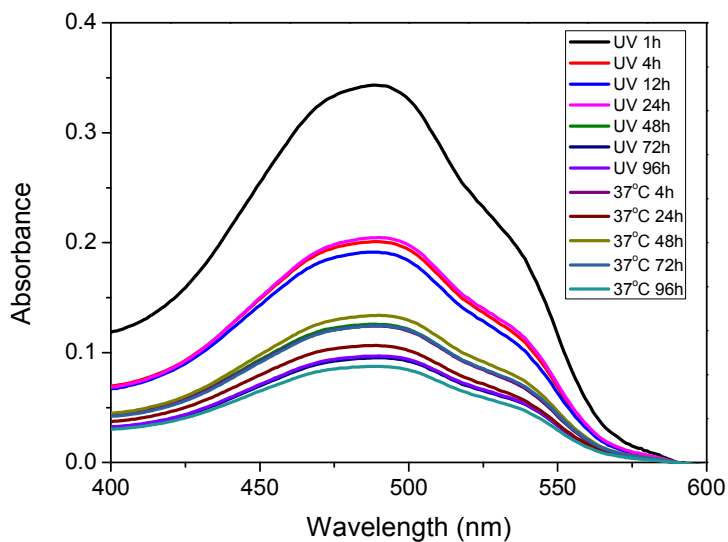


Fig. S4 UV-Vis monitoring of DOX release from mPEG-PLGA-BNN6-DOX after 2 min UV irradiation or just incubation at 37 °C in the dark for 96 h.

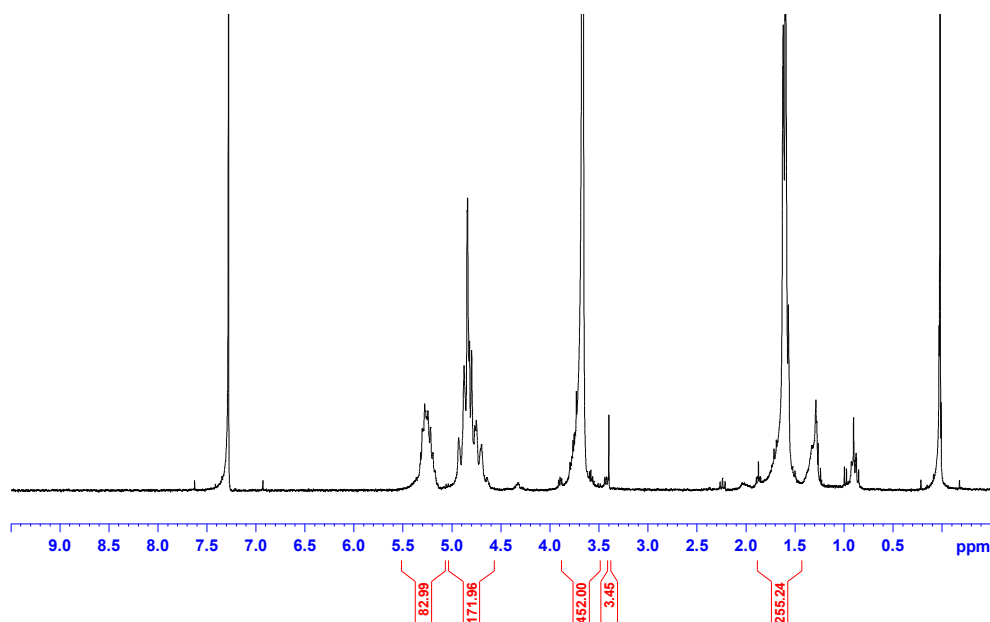


Fig. S5 ^1H NMR spectrum of mPEG-PLGA copolymer: 3.72 ($-\text{O}-\text{CH}_2\text{CH}_2-$), 1.61 ($-\text{CH}_3$), 4.82 ($-\text{CO}-\text{CH}-\text{O}$), 5.28 ($-\text{CO}-\text{CH}_2-\text{O}-$).

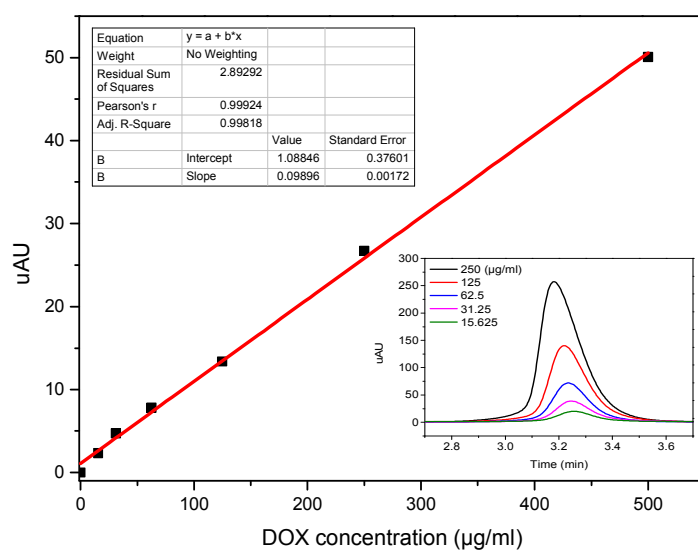


Fig. S6 DOX standard curve by HPLC. Different concentrations of doxorubicin (from 250 to 0 $\mu\text{g}/\text{mL}$) in acetonitrile/ H_2O (1/1) solution were detected by HPLC to establish a standard curve.