Electronic Supplementary Material (ESI) for RSC Advances

Supporting Information

Dendrimer-based multilayer nanocarrier for potential synergistic paclitaxel-doxorubicin combination drug delivery

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1. ^{1}H NMR of DOX and DOX-BMPH

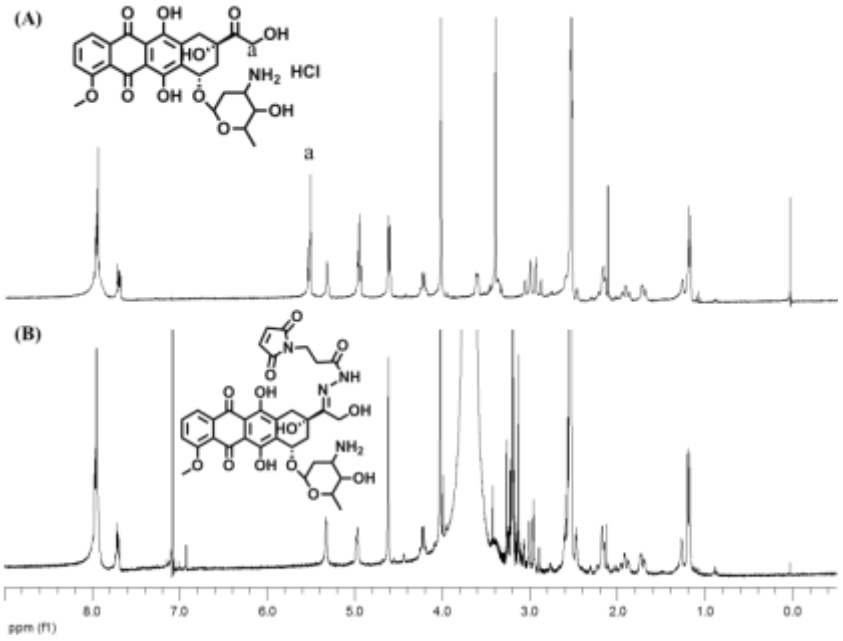


Figure S1. ^{1}H NMR of DOX (A) and DOX-BMPH (B).solvent:$CDCl_3$.

2. Element analysis and GPC measurementof PAMAM-oligo-PCL-OH

	C	H	O	N
Test value	61.24%	8.69%	26.83%	3.24%
Theoretical value	60.78%	8.80%	27.18%	

Figure S2. Element analysis of PAMAM-oligo-PCL-OH

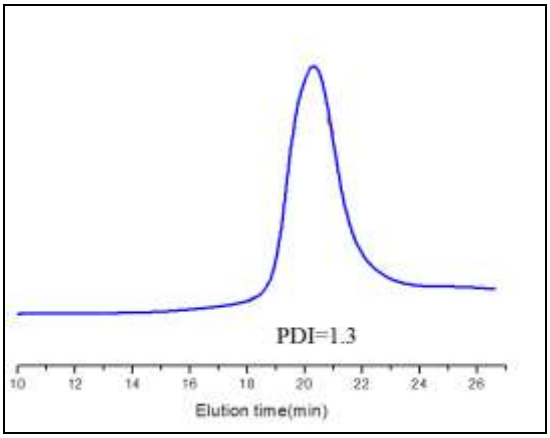


Figure S3. GPC measurement of PAMAM-oligo-PCL-OH

3. ^{1}H NMR of PAMAM-PCL 、 PAMAM-PCL-OTS 、 PAMAM-PCL-N_3 and PAMAM-PCL-D1.0-PEG

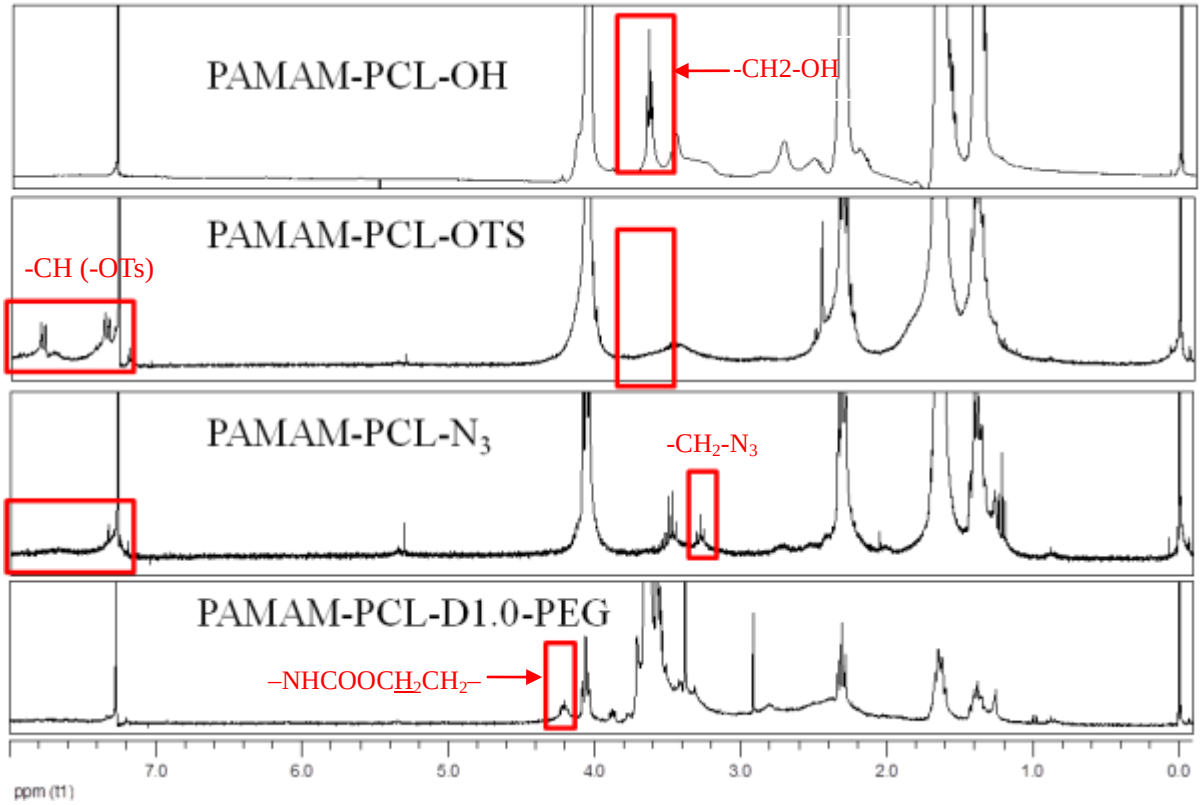


Figure S4. ^{1}H NMR of PAMAM-PCL、PAMAM-PCL-OTS、PAMAM-PCL-$N_3$and PAMAM-PCL-D1.0-PEG. Solvent: $CDCl_3$.

4. FT-IR measurements of PAMAM-PCL-N_3 and PAMAM-PCL-D1.0

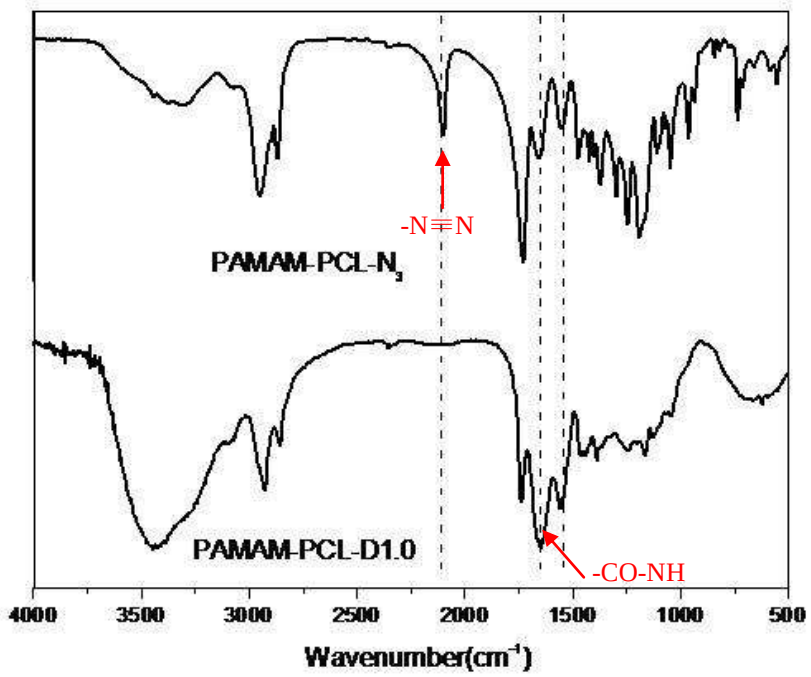


Figure S5. FT-IR measurements of PAMAM-PCL-N_3 and PAMAM-PCL-D1.0

5. DLS measurement of PPDP

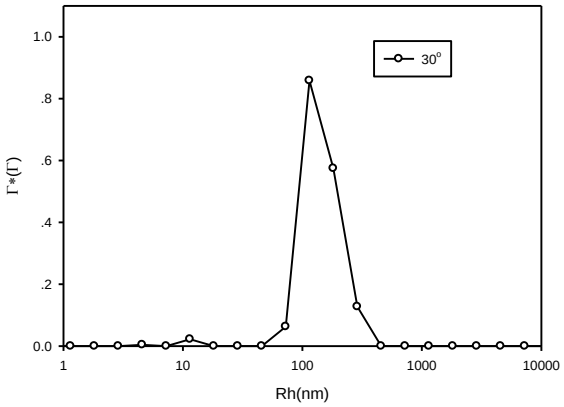


Figure S6. DLS measurement of PPDP

6. HPLC measurement of PTX loading

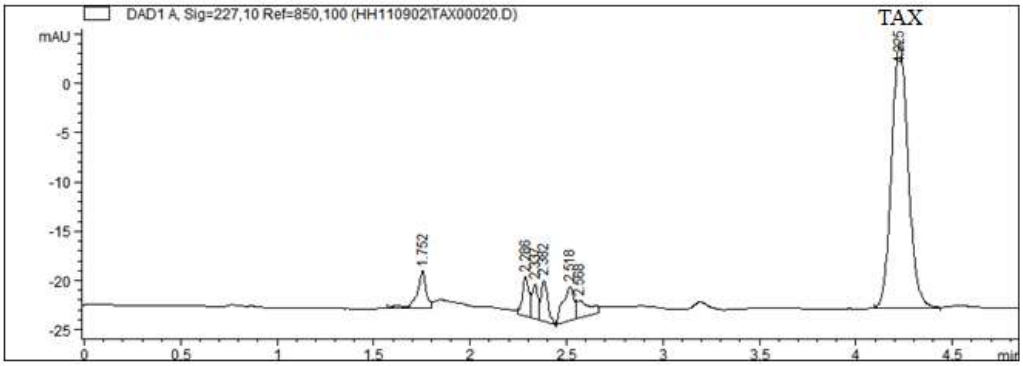
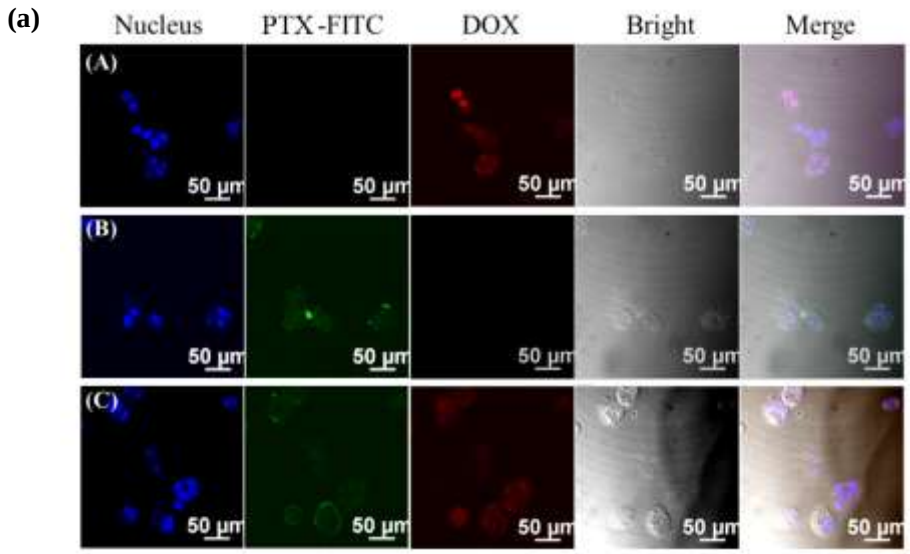


Figure S7. HPLC measurement of PTX loading

7. Confocal images of the MCF-7 in PPDP-enc-DOX+PTX system



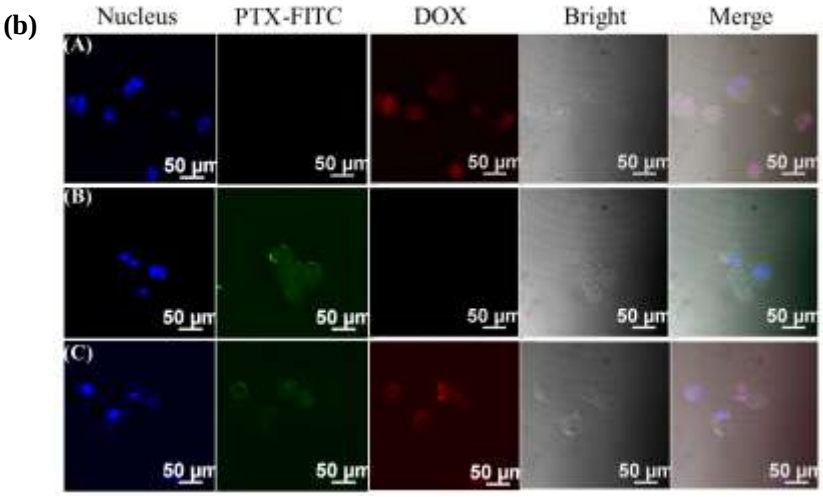


Figure S8. Confocal images of the MCF-7 cells incubated with 20 mM (a) free DOX; (b) free PTX; (c)

PPDP-enc-DOX+PTX, respectively in (a) 2h; (b) 4h. For each panel, images from left to right showed the cells with nuclear staining by Hoechst 33258, PTX-FITC, DOX fluorescence, bright field and overlays of both images (scale bar, 50 μm).

8. Confocal images of the MCF-7/ADR cells in PPDP-coj-DOX-enc-PTX system

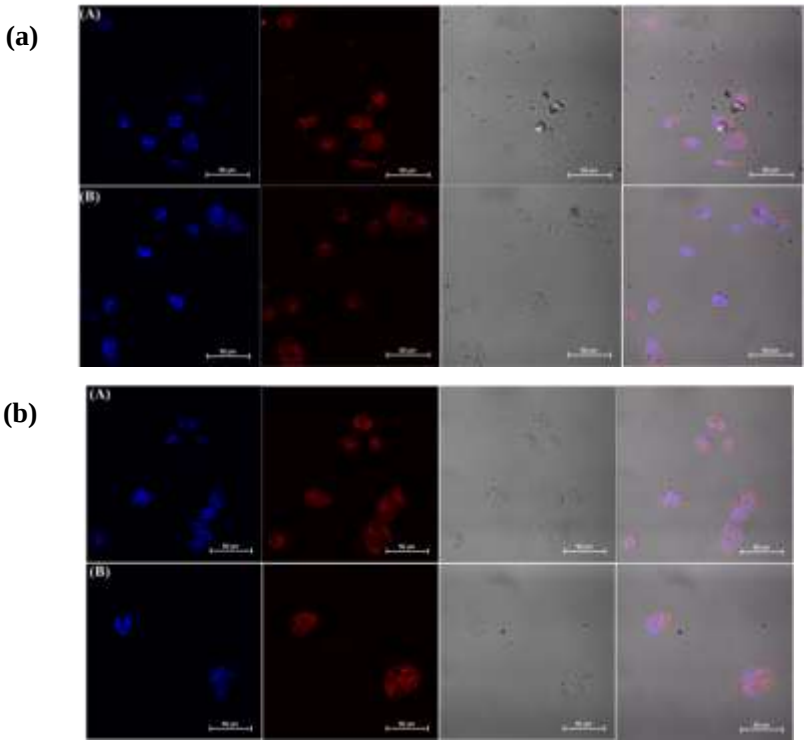


Figure S9. Confocal images of the MCF-7/ADR cells incubated with 20 mM (a) free DOX; (b) PPDP-coj-DOX-enc-PTX, respectively in (a) 2h; (b) 4h. For each panel, images from left to right showed the cells with nuclear staining by Hoechst 33258, DOX fluorescence, bright field and overlays of both images (scale bar, 50 μm).