Effective *in vitro* delivery of Paclitaxel by nanocargo of mesoporous Polycaprolactone against triple negative breast cancer cells by minimalizing drug dose

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Fig. S1 DLS analysis and particle size distribution of (a) PZ and (b) HPZ NCs.



Fig.S2 (A) Phase, solid state crystal structure study analysis by XRD. XRD pattern of PZ and HPZ NCs. Zeta potential analysis: (B) Zeta potential of PZ and (C) HPZ recorded at 25 °C in deionized water.



Fig.S3 Effect of various concentrations of Taxol on the viability of MDA-MB231 cells. (A) Microscopic images showing the morphology of the MDA-MB231 cells at post-treatment of mentioned increasing concentrations of Taxol. Scale bar- 50 μ m, magnification-10x. (B) *In vitro* cytotoxic effect of Taxol after treatment for 24 h at various increasing concentration on MDA-MB231 cells by MTT assay. Data are presented as mean \pm SD, (n=3).