Electronic Supplementary Material (ESI) for Journal of Materials Chemistry B.

Electronic Supporting Information

Polyphenol-modified Nanovesicles for Synergistically Enhanced *in vitro* Tumor Cell Targeting and Apoptosis

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Supplementary data

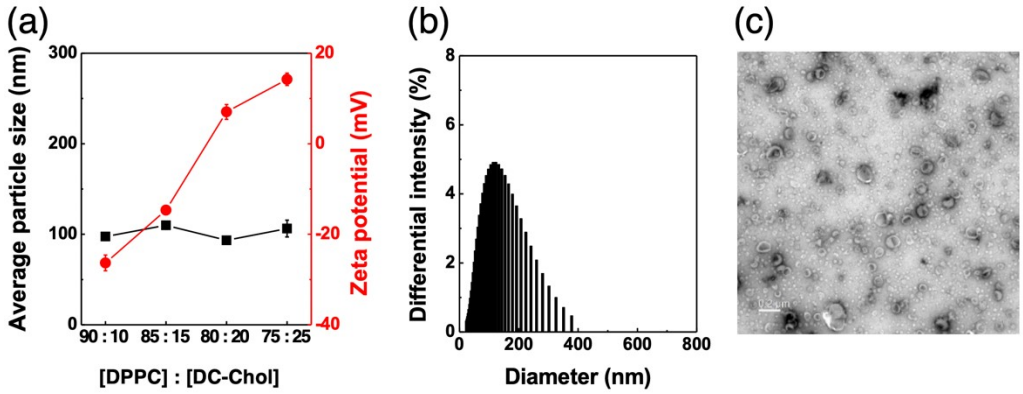

Figure S1. (a) Size and zeta potential of NVs varying with stoichiometric ratio of DPPC/DC-Cholesterol. (b) Hydrodynamic diameters of the NVs. (c) TEM image of NVs.

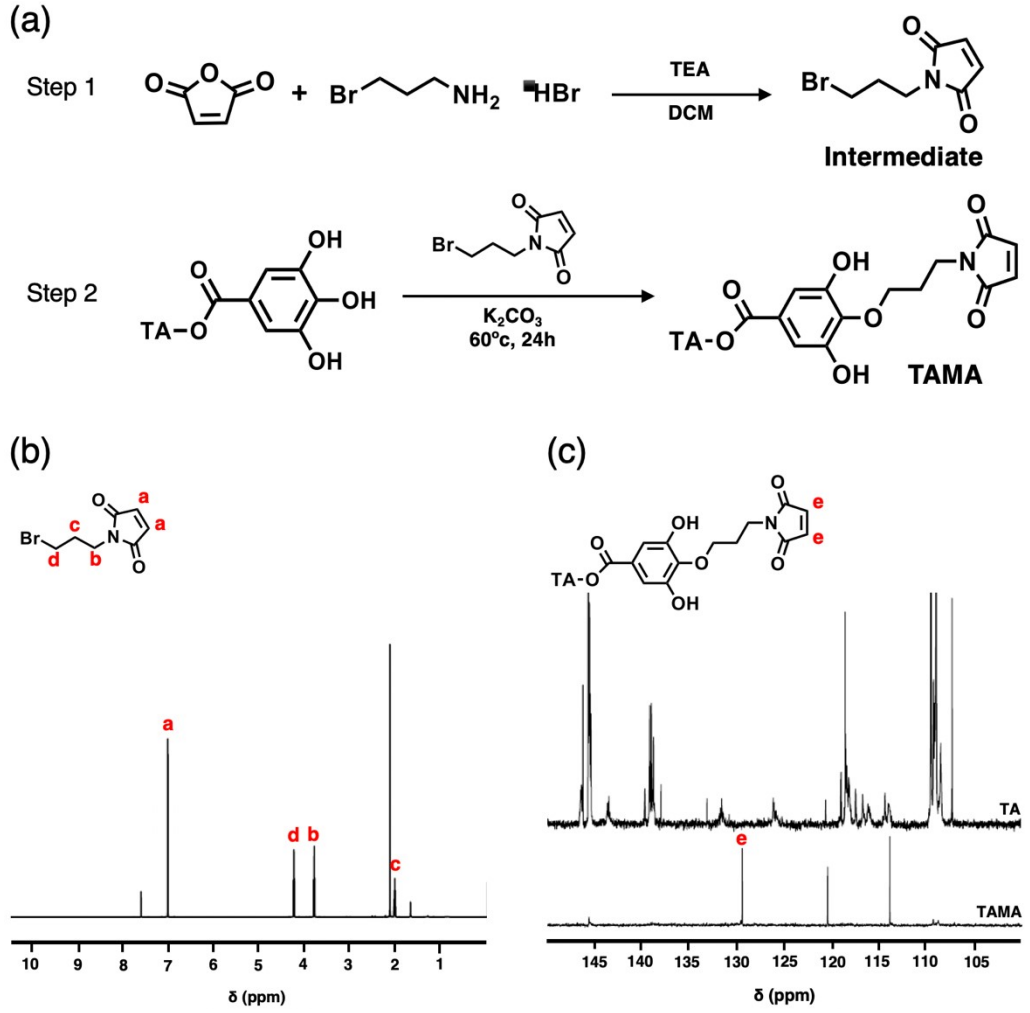

Figure S2. (a) Synthesis of TAMA. (b) ^{1}H NMR of N-3-bromopropylmaleimide. (c) ^{13}C NMR of TA and TAMA.

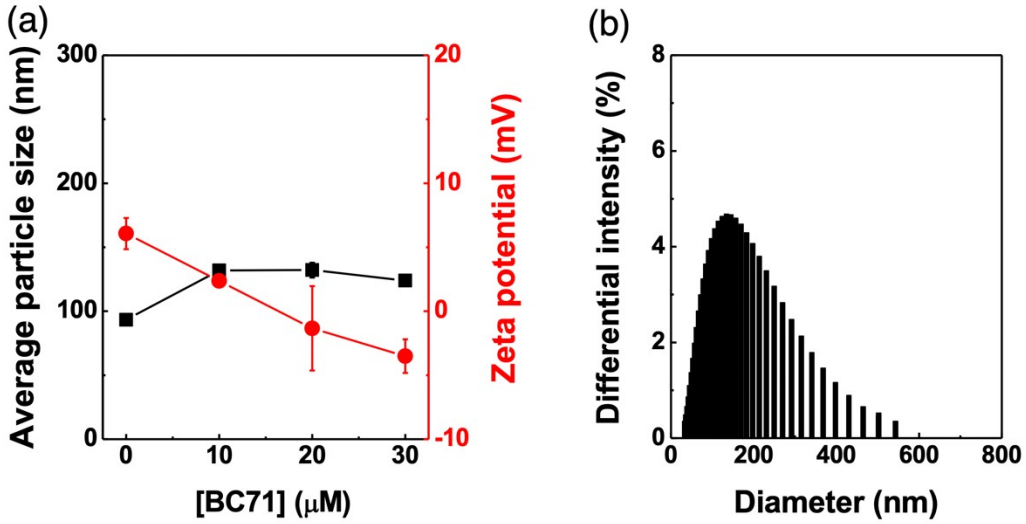

Figure S3. (a) Size and zeta potential of NV_{BC71} varying with the concentration of BC71. (b) Hydrodynamic diameter of $NV_{BC71\text{-}30\ \mu M}$.

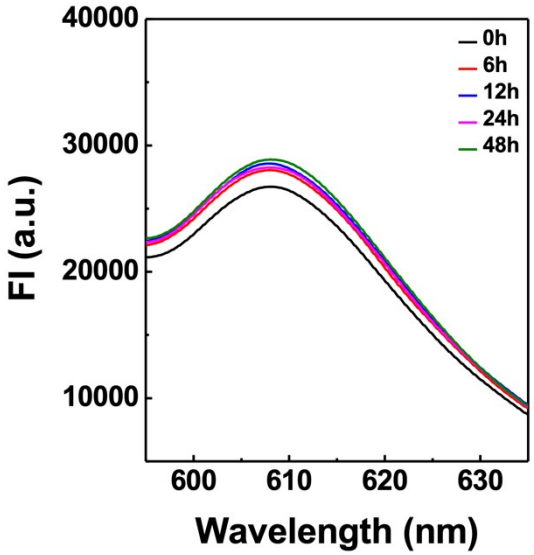

Figure S4. Fluorescence spectra of Texas red DHPE-loaded $TANV_{BC71}$ after incubation with FBS/PBS (1/9, v/v) as a function of time.

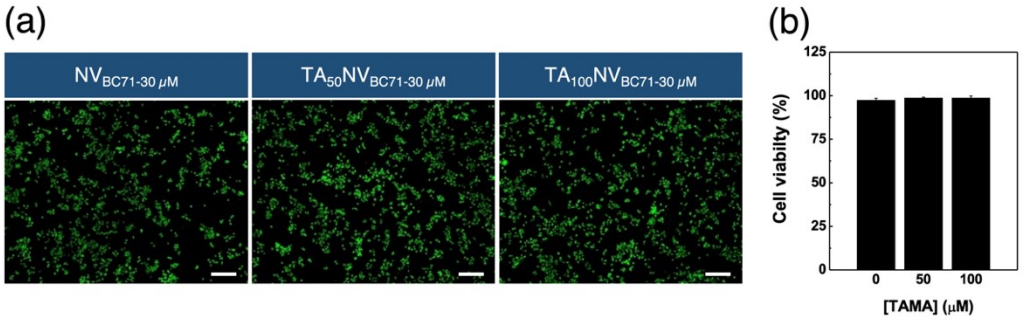

Figure S5. (a) Fluorescence images of HaCaT cells treated with $NV_{BC71\text{-}30\ \mu M}$, $TA_{50}NV_{BC71\text{-}30\ \mu M}$ and $TA_{100}NV_{BC71\text{-}30\ \mu M}$. The scale bar is 50 μm. (b) Cell viability (HaCaT) after treatment of $NV_{BC71\text{-}30\ \mu M}$, $TA_{50}NV_{BC71\text{-}30\ \mu M}$ or $TA_{100}NV_{BC71\text{-}30\ \mu M}$ through live/dead fluorescence image analysis.

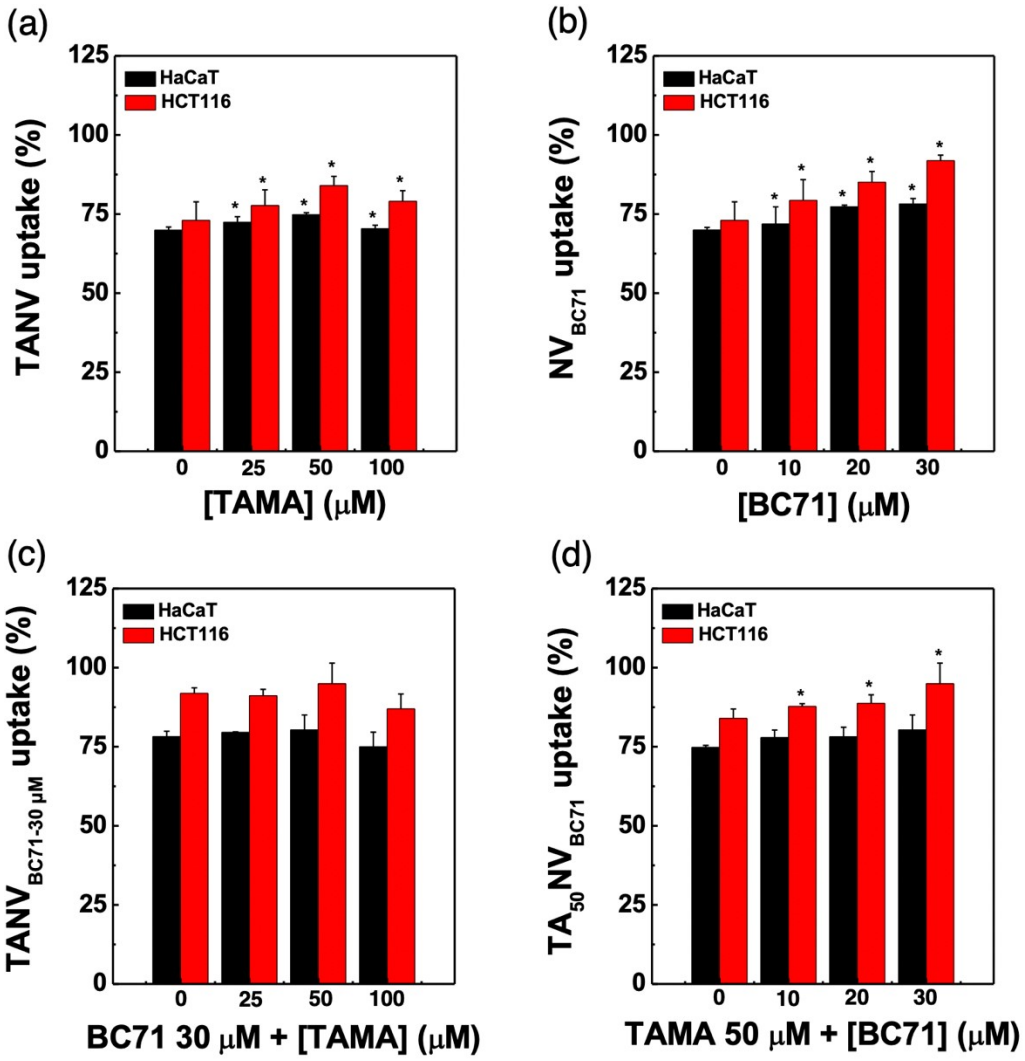

Figure S6. Quantitative cellular uptake of (a) TANVs with varying the concentration of conjugated TAMA (*p < 0.05 compared to treated NVs), (b) NV_{BC71} with varying the concentration of BC71 (*p < 0.05 compared to treated NVs), (c) $TANV_{BC71\text{-}30\ \mu M}$ with varying the concentration of TAMA (*p < 0.05 compared to treated $NV_{BC71\text{-}30\ \mu M}$), and (d) $TA_{50}NV_{BC71}$ with varying the concentration of BC71 (*p < 0.05 compared to treated TA_{50}NVs). HaCaT cells (black) and HCT116 cells (red) were used.