pH-Responsive Lipid Nanocapsules: A Promising Strategy for Improved Resistant Melanoma Cell Internalization

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Figure S1. Stability of Blank LNC (“BLK”) and modified LNC with polymer C18H37-P(NVP15-co-Vim5) (“P1”), C18H37-P(NVP22-co-Vim8) (“P2”), C18H37-P(NVP35-co-Vim10) (“P3”), C18H37-P(NVP21-co-Vim15) (“P4”) and C18H37-P(NVP31-co-Vim15) (“P5”). Stability was assessed by measuring the hydrodynamic diameter (nm) at pH 7.4 (A) and 6 (B), and zeta potential (mV) at pH 7.4 (C) and 6 (D) every week for 4 weeks. Results (n = 3) are expressed as mean measure ± standard deviation * p < 0.05.
Figure S2. Confocal imaging of SK-Mel 28 cells after 2 h of incubation Blank LNC (“BLK”) and LNC post-inserted by C_{31}H_{37}-PNVP (“P1”), C_{31}H_{37}-P(NVP_{15}-co-Vims) (“P2”), C_{31}H_{37}-P(NVP_{22}-co-Vims) (“P3”), C_{31}H_{37}-P(NVP_{35}-co-Vims) (“P4”) and C_{31}H_{37}-P(NVP_{21}-co-Vims) (“P5”) at pH 7.4, 6.8, 6.5 and 6. Cell nucleus was stained with DAPI (in blue), green signal comes from the fluorescent LNC. Objective used: 63x/NA 1.40 oil with 2x numerical zoom, white lines represent two orthogonal sections used to analyze nanoparticle uptake. Scale bars correspond to 10 µm.