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Supporting Information

POLYMERIC MICELLES FROM BLOCK

COPOLYMERS CONTAINING

2,6-DIACYLAMINOPYRIDINE UNITS FOR

ENCAPSULATION OF HYDROPHOBIC DRUGS

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The degree of polymerization of the PDAP block (m) was calculated from the relative integration of the signals at $\delta = 3.65$ and 2.35 ppm, which respectively correspond to the methylene protons of the PEG block O-C H_2 -C H_2 -O (coded as b in Figure S1) and the methylene protons CO-C H_2 -CH₃ (coded as k) of the PDAP block, and using as reference the value n=45 of the PEG block previously measured by MALDI-TOF mass spectrometry (M_n^{MS} in **Table 1**).

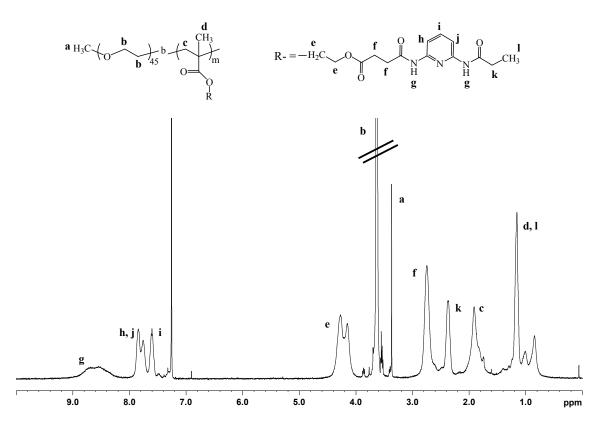


Figure S1. ¹H NMR spectrum (400 MHz, CDCl₃) of **PEG₂-b-PDAP**. The degree of polymerization of the PDAP block (m) was calculated from the relative integration of signals b and k, taking 45 as degree of polymerization for the PEG block (this value was determined by MALDI-TOF mass spectroscopy)

At low concentrations of polymer, the weak fluorescence intensity indicates that Nile Red is preferentially in water and, therefore, few micelles are present. At higher concentrations, the emission intensity increases indicating that Nile Red is located in a more hydrophobic environment as a consequence of being encapsulated by the micelles. The relationship between fluorescence intensity (maximum) and logarithm of the concentration is non-linear and the CAC is determined at the intersection point (**Figure S2**).

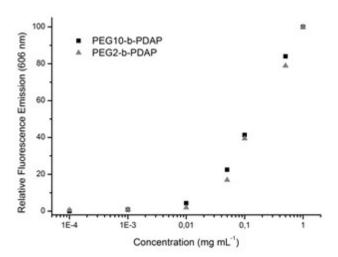
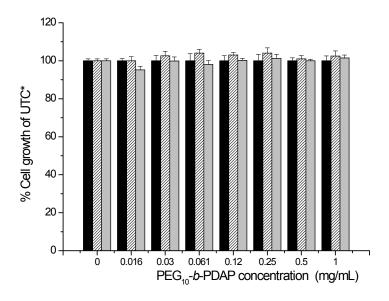


Figure S2. Fluorescence intensity of Nile Red at 606 nm (λ_{exc} = 550 nm) versus BC concentration (mg mL⁻¹)



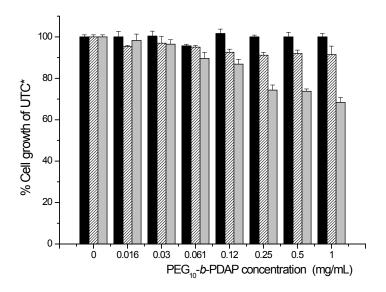


Figure S3. Cells viability in Huh 7-Lunet (upper graph) and HeLa (lower graph) cell lines at increasing **PEG**₁₀-*b***-PDAP** concentration after 24 h (black bars), 48 h (stripped bars) and 72 h (grey bars) incubation times. *UTC: untreated controls.