

Supplementary Materials

for

Ultrasonic Film Rehydration Synthesis of Mixed Polylactide Micelles for Enzyme-Resistant Drug Delivery Nanovehicles

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Differential scanning calorimetry measurements were performed using Netzsch DSC 204 F1 (Germany) at heating rate 10 °C/min. The samples of PLAMs were lyophilized prior measurements and 2 mg of samples were used. For the PLA-NH₂ and PLA-PEG samples no additional manipulations prior DSC measurements were made. The results were analyzed using software supplied by manufacturer.

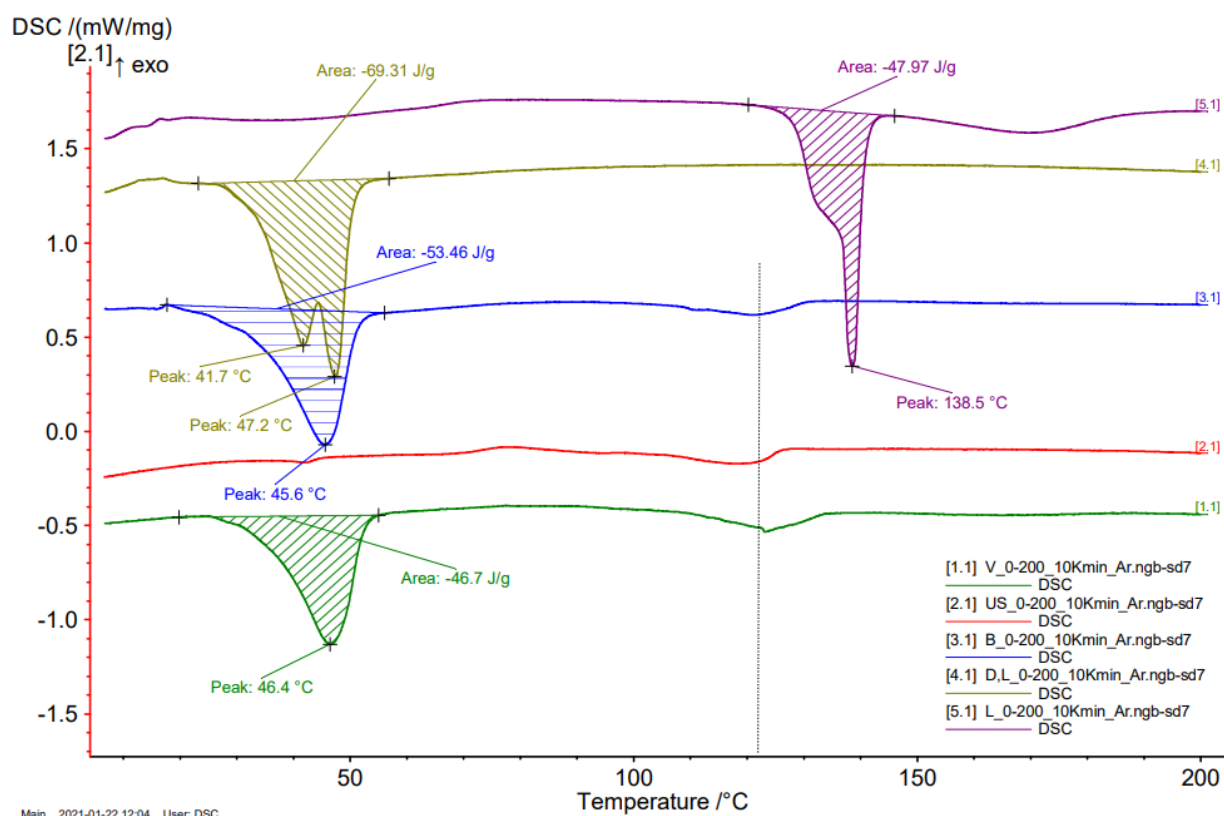


Figure S1. DSC curves for PLAMs-v (1.1); PLAMs-us (2.1); PLAMs-sb (3.1); PLA-PEG (4.1); PLA-NH₂ (5.1). Heating rate 10 °C/min.

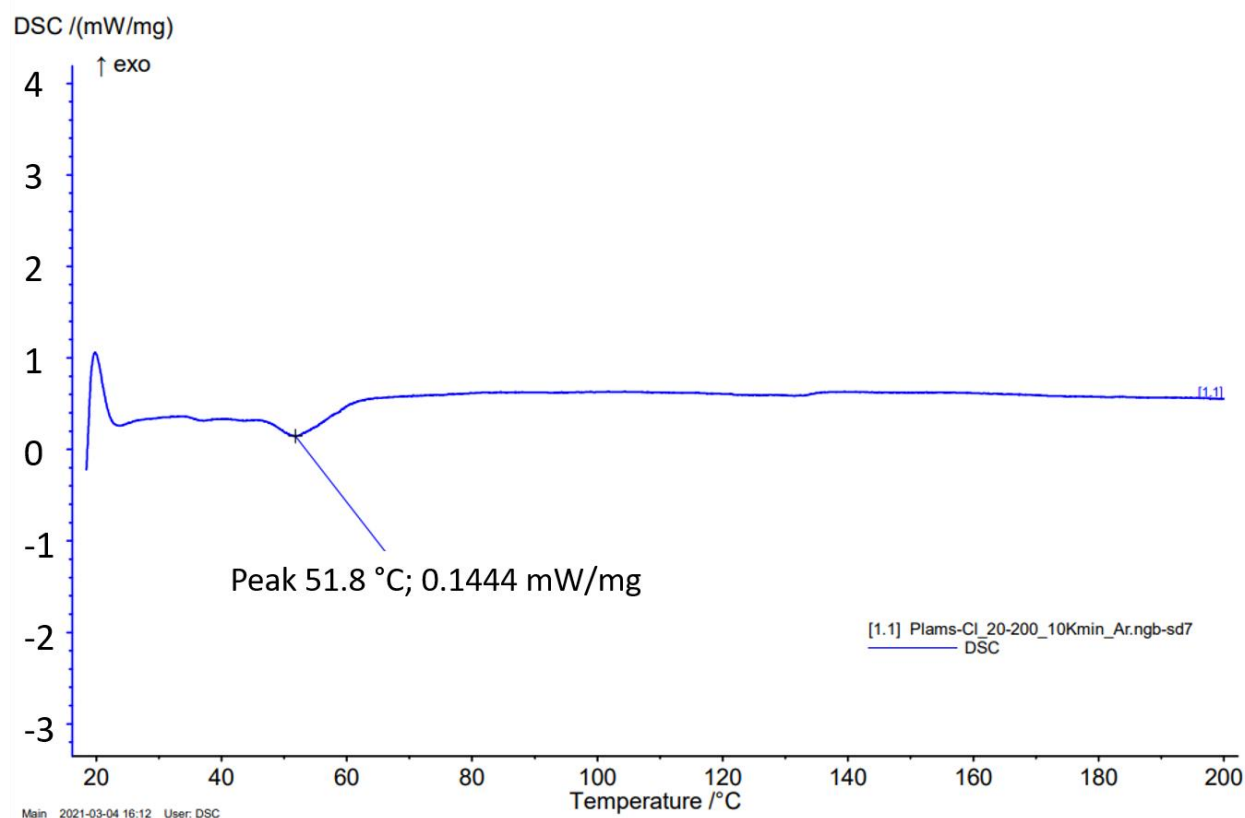


Figure S2. DSC curve for PLAMs-cl. Heating rate 10 °C/min.

IR-spectra of samples were obtained using Carl Zeiss Jena Specord M-80 IR (Germany). The 20 μ l droplet of PLAMs suspension with concentration 1 mg/ml was deposited between two KBr glasses and the spectrum was recorded in absorption regime in wavelength range from 400 to 2000 cm^{-1} .

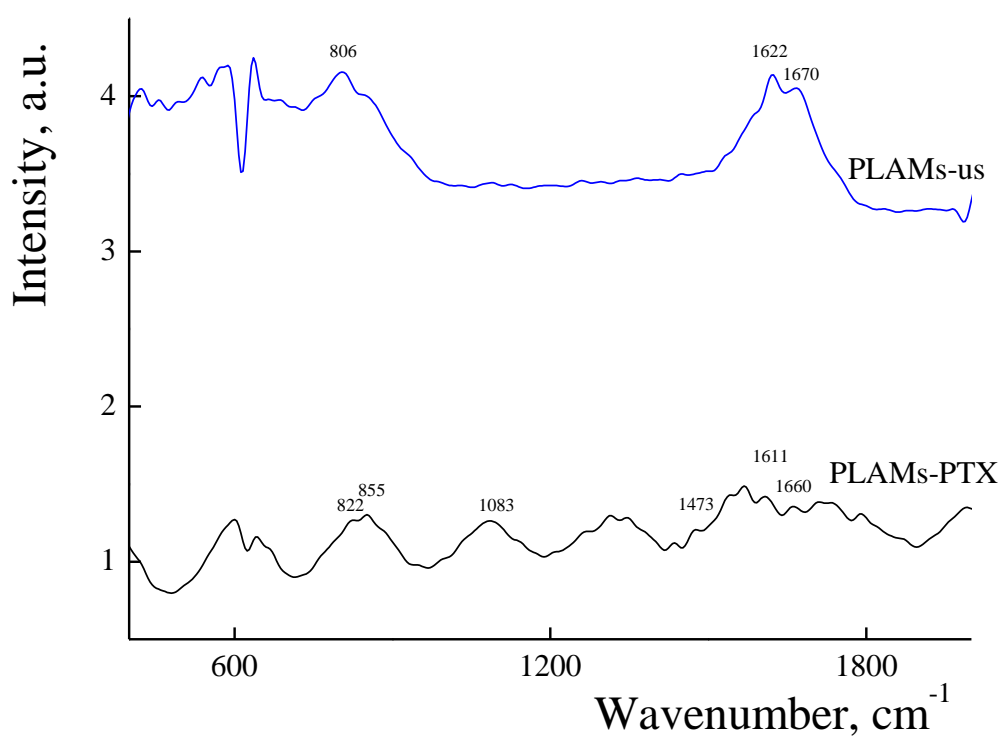


Figure S3. IR-spectra of PLAMs-us and PLAMs-PTX.

The hydrodynamic diameters of PLAMs were obtained by dynamic light-scattering using Brookhaven ZetaPlus (Brookhaven, USA) equipment and DynaLS software package for size distribution analysis

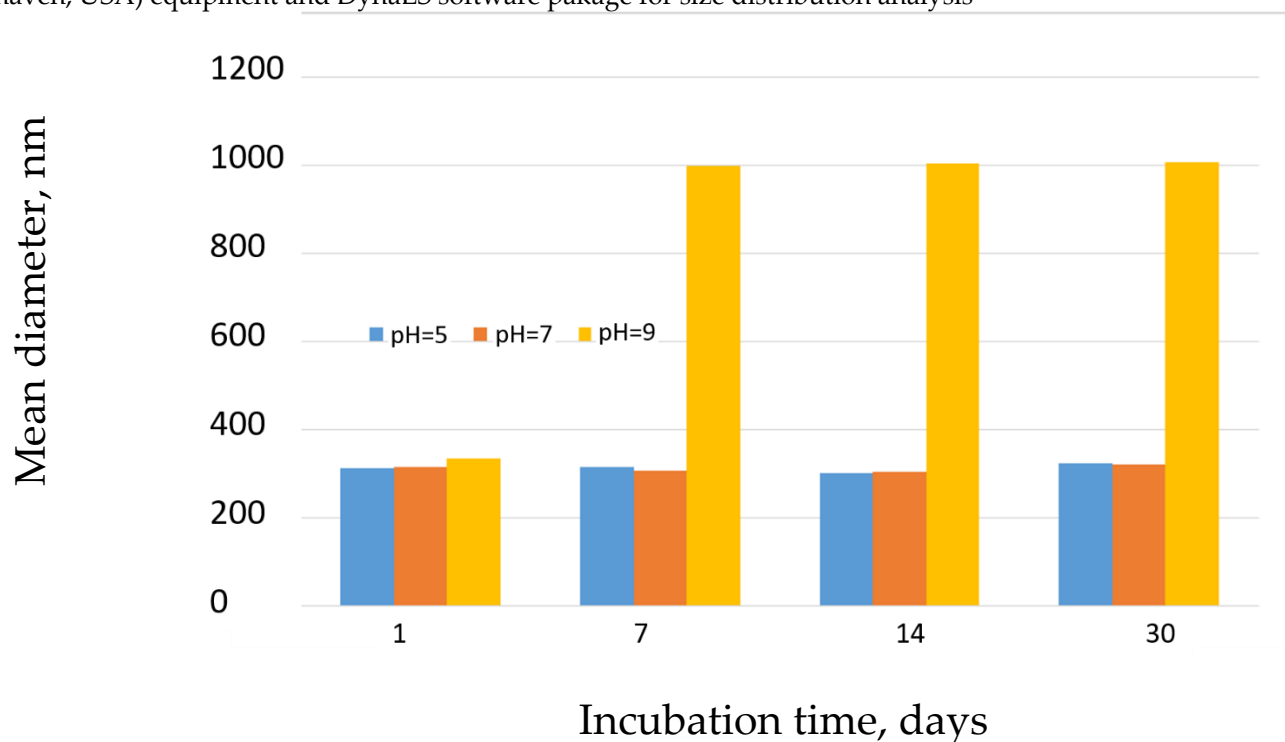


Figure S4. Time dependence of hydrodynamic diameters of PLAMs-us in buffers with pH = 5 (blue), pH = 7 (red) and pH = 9 (yellow). PLAMs-us concentration 0.5 mg/ml.

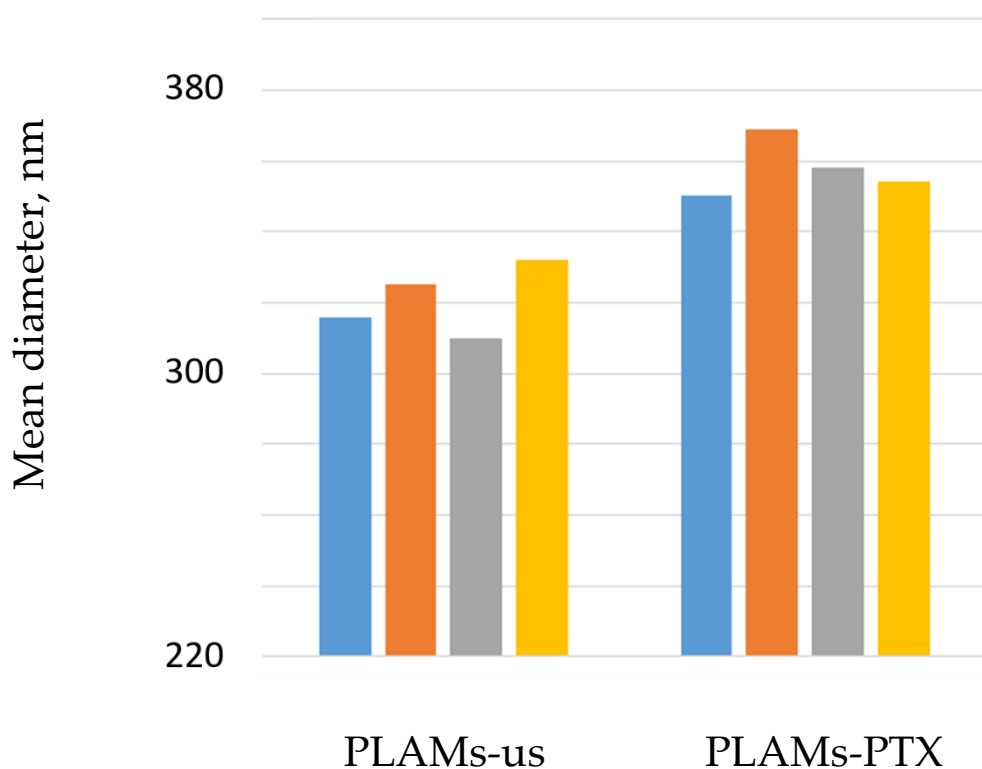


Figure S5. Time dependence of hydrodynamic diameters of PLAMs-us and PLAMs-PTX in buffer with pH = 7 at 7 days (blue), 14 days (red), 21 day (grey), 30 days (yellow). PLAMs-us and PLAMs-PTX concentrations 0.5 mg/ml.