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MDPI

Supplement to

Chitosan-azide nanoparticle coating as degradation barrier in multilayered polyelectrolyte drug delivery systems

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Supplementary Materials:

Purification of Chitosan: Chitosan (DDA 75-85%) was purified by a method according to GAN ET AL. Chitosan was added to a 1 M NaOH and stirred at 70°C for 2h. Chitosan flakes were filtered off, washed with deionized water and were dissolved in 1% (w/v) acetic acid. Finally, the purified chitosan was obtained by dialyses of the filtrate (cutoff 10 kDA) against 0.1 M NaCL solution and deionized water following by subsequent lyophilization.

Azide-"blocking"-middle layer

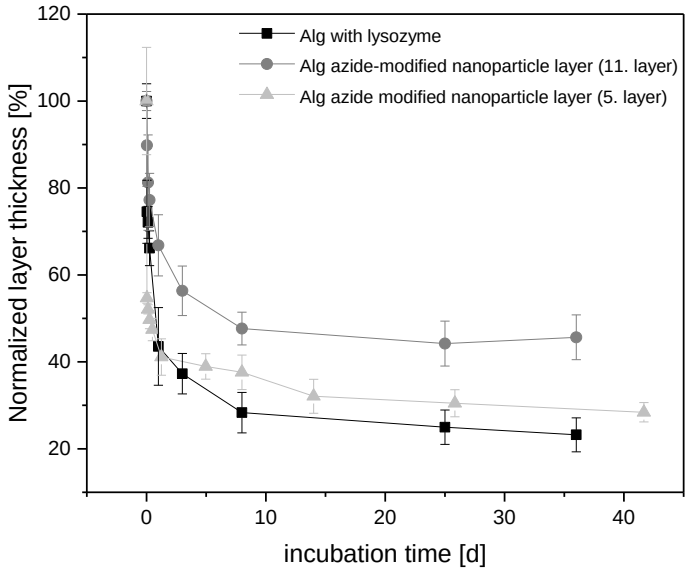

Figure S1: Degradation of CS(17)-TPP multilayer system (Alg) in PBS-puffer at 37°C. Lysozyme has been added to reach a concentration of 1,5 µg/mL. For CS-Az retarding, the 11th top layer was deposited by dipping in 1 mg/mL CS-Az-TPP NP solution and subsequently crosslinking under UV-light. For the intermediate blocking layer CS-Az-TPP NPs were deposited at 5th layer. Lysozyme was also added to the CS-Az experimental group. N > 3.

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