Supplementary Information

Cellular Responses of Hyaluronic Acid Coated-Chitosan Nanoparticles

Abdulaziz Almalik, Ibrahim Alradwan, Majed A. Majrashi, Bashayer A. Alsaffar, Abdulmalek T. Algarni, Mohammed Alsuaibeyl, Haitham Alrabiah, Nicola Tirelli, and Ali H. Alhasan

Figure Captions:

Supplementary Figure S1: Plots of reduced and inherent viscosity of chitosan before and after depolymerisation with sodium nitrite at the concentration of 0.5 mM for 12 hrs.

Supplementary Figure S2: Cytotoxicity profiles of CHO-K1 cells exposed to nanoparticles for 24 and 48 hrs.

Supplementary Figure S3: Two representative bright field images of CHO-K1 cell lines treated with 2.5 mg/mL HA-CS NPs for 48 hrs.

Supplementary Figure S4: Activation of RAW 264.7 macrophages with LPS. A) Production of TNF-α as a function of LPS concentration upon 24-hr exposure. B) Viability of macrophages under the same conditions.
Supplementary Figure S1: Plots of reduced and inherent viscosity of chitosan before and after depolymerisation with sodium nitrite at the concentration of 0.5 mM for 12 hrs. The intrinsic viscosity was calculated as the intercept of Huggins and Kraemer plots with the ordinate axis (at concentration = 0 mg/mL) for the two samples with the highest molecular weight, or as the intercept of the Huggins plot with the ordinate axis for the two samples with the lowest molecular weight. The intrinsic viscosities were used to calculate the viscosimetric average molecular weight using the Mark-Houwink equation.
**Supplementary Figure S2:** Cytotoxicity profiles of CHO-K1 cells exposed to nanoparticles for 24 and 48 hrs. *Top:* Activation of caspase 3 activities as a function of different doses of nanoparticles. *Bottom:* Depletion of superoxide dismutase (SOD) of CHO-K1 cells under the same conditions.

**Supplementary Figure 3:** Two representative bright field images of CHO-K1 cell lines treated with 2.5 mg/mL HA-CS NPs for 48 hrs.
Supplementary Figure S4: Activation of RAW 264.7 macrophages with LPS. A) Production of TNF-α as a function of LPS concentration upon 24-hr exposure. B) Viability of macrophages under the same conditions.