

# Application of gold nanoparticles (AuNPS) of different concentrations to improve the therapeutic potential of autologous conditioned serum (ACS) – potential implications for equine regenerative medicine

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## SUPPLEMENTARY DATA

### *Influence of AuNPS addition on blood pH change*

According to check if the addition of AuNPS at all tested concentrations changes the pH of whole blood, which may be the reason of platelet activation, we measured it and did not observed any significant change in pH (higher than 0,01). Therefore we excluded the role of pH change in platelet activation.

### *Influence of additional substances present in AuNPS solution on platelet activation*

In order to exclude that the PLL and ascorbic acid present in AuNPS solution might be responsible for platelet activation, we performed an additional test by incubating the whole blood with solutions deprived of AuNPS. This solution was centrifuged at 15000 x g for one hour - the deprivation of nanoparticles was confirmed by the presence of precipitate and the loss of solution's red color. So prepared solution was added to the whole blood at the highest tested concentration (10%) and incubated 24 hours at 37°C. After the incubation, platelets were fixed, isolated and observed by means of SEM.

Observations revealed no significant activation of platelets from the contact with 10% of experimental solution deprived of AuNPS (Figure S1).

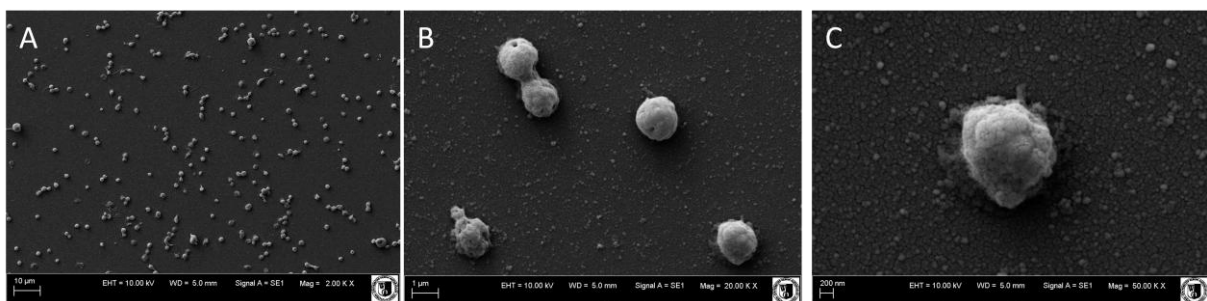


Figure S1. The morphology of platelets incubated with 10% of experimental solution deprived of AuNPS. There is no significant number of active platelets visible. SEM, mags 2000 x (A), 20000 x (B), 50000 x (C).