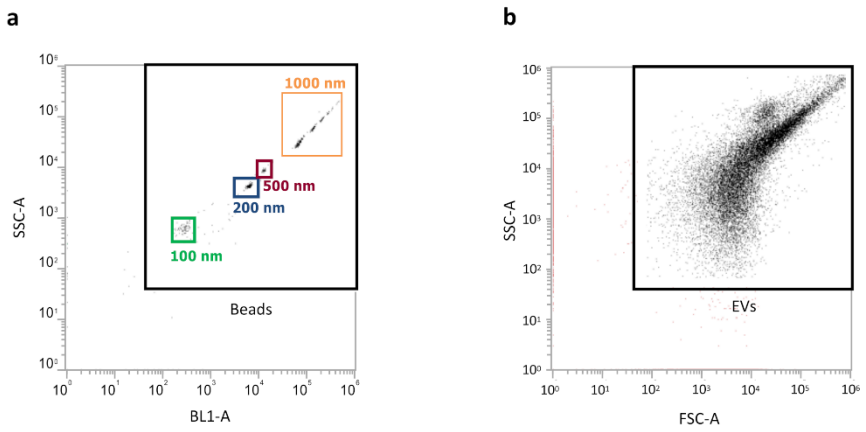
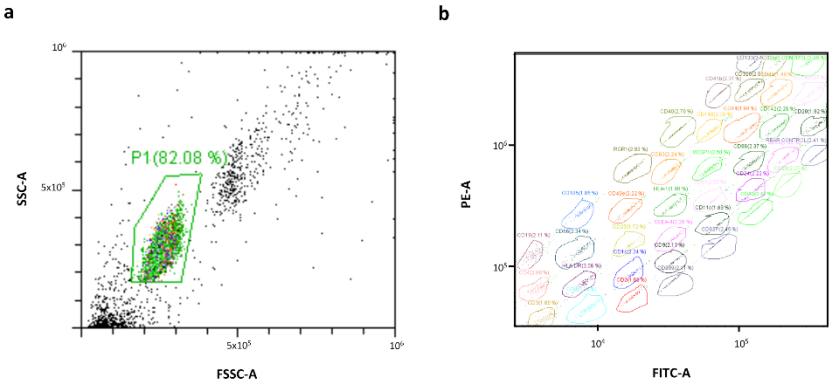



**Supplementary figure 1.**

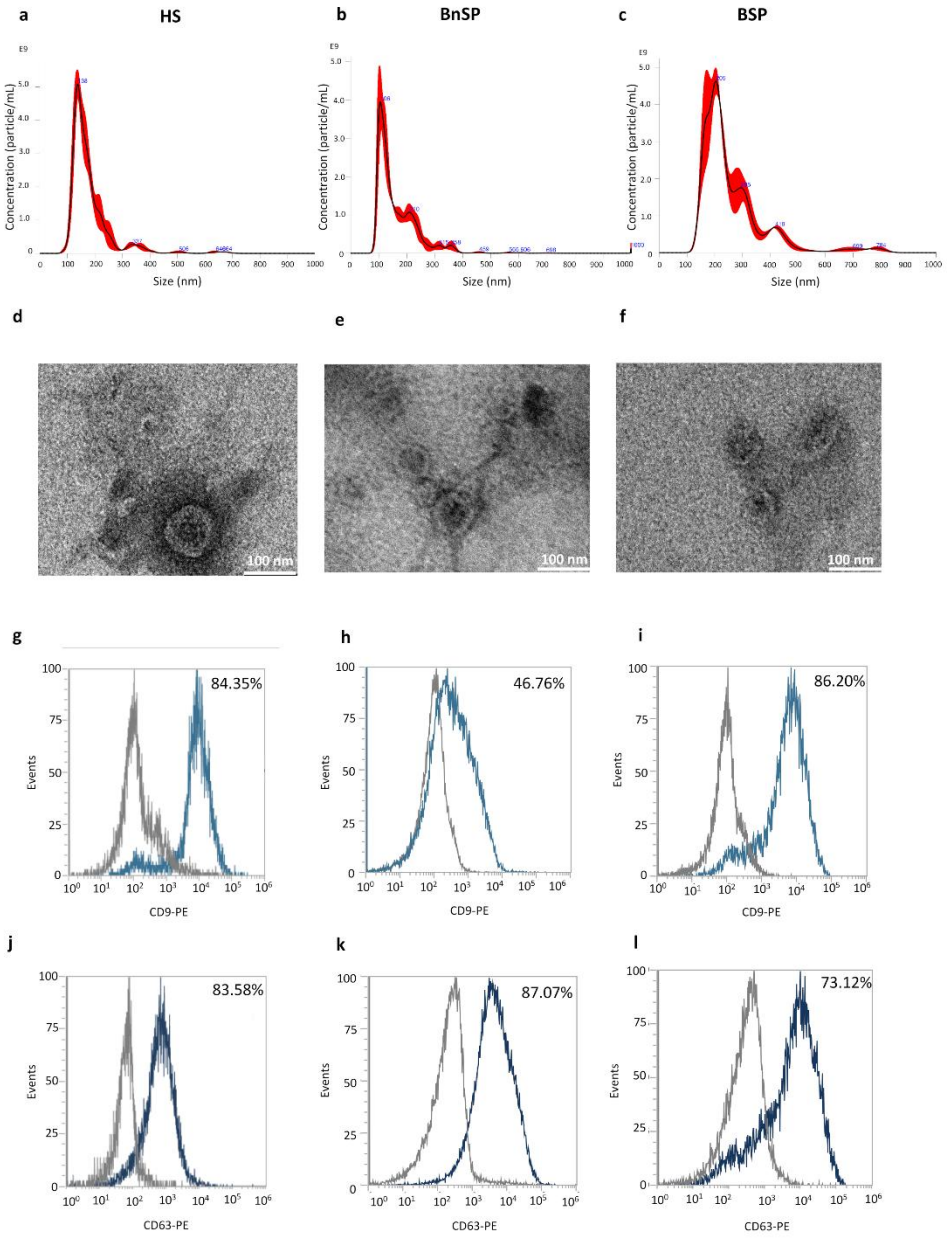
Construction of EVs gates using size-calibrated fluorescent beads ranging from 100-1000 nm (**a**) and plasma-derived EVs morphology gated (**b**).




**Supplementary figure 2.**

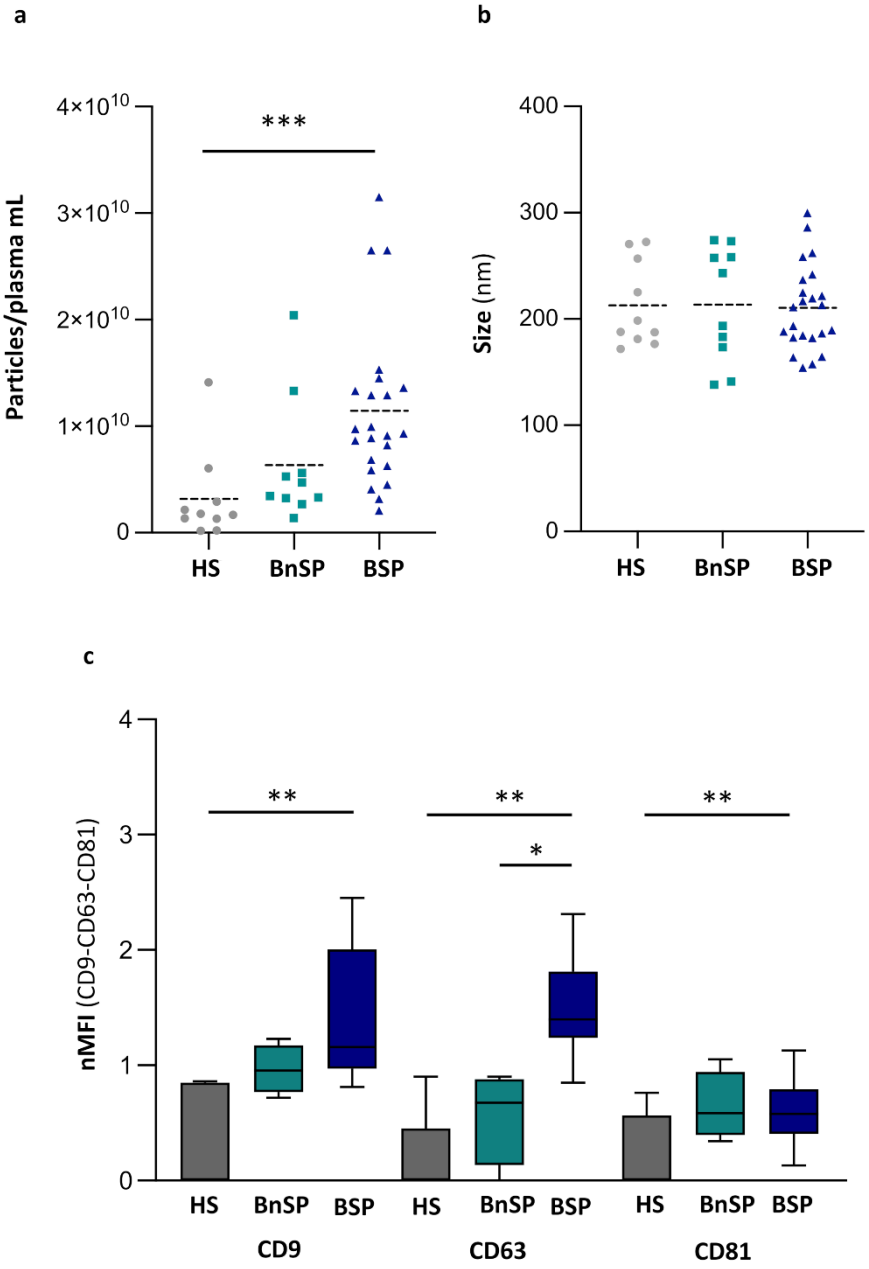
Bead-based extracellular vesicle analysis by flow cytometry using MACSplex Exosome Kit. **(a).** Analysis example showing exclusion of doublets and no bead events. (**b**). Representative dot plot of 39 bead populations identified by their different fluorescence in the FITC vs. PE channel.

Positive bead populations are highlighted in colours. Black events represent beads that did not bind EVs or beads with EVs not detected by the staining cocktail.




**Supplementary figure 3.**

Characterization of EVs isolated from the plasma of HS. **a-c.** Representative NTA analysis showing the concentration (particle/mL) size distribution of HS (**a**), BnSP (**b**) and BSP (**c**). **d-f**. Transmission electron microscopy derived from the plasma of HS (**d**), BnSP (**e**) and BSP (**f**). Scale bar 100 nm. **g-l**. Representative flow cytometric analysis of EV markers CD9 of HS (**g**), BnSP (**h**) and BSP (**i**), and CD63 of HS (**j**), BnSP (**k**) and BSP (**l**), compared with their appropriate isotype control (grey). Fluorescence (CD9-PE, CD63-PE; x-axis) *vs.* number of events (events; y-axis). The percentage expresses the overtone between isotype and antibody (**g-l**). NTA, Nanoparticle Tracking Analysis; TEM, Transmission Electron Microscopy; HS, healthy subjects; BnSP, burn non-septic patients; BSP, burn septic patients.

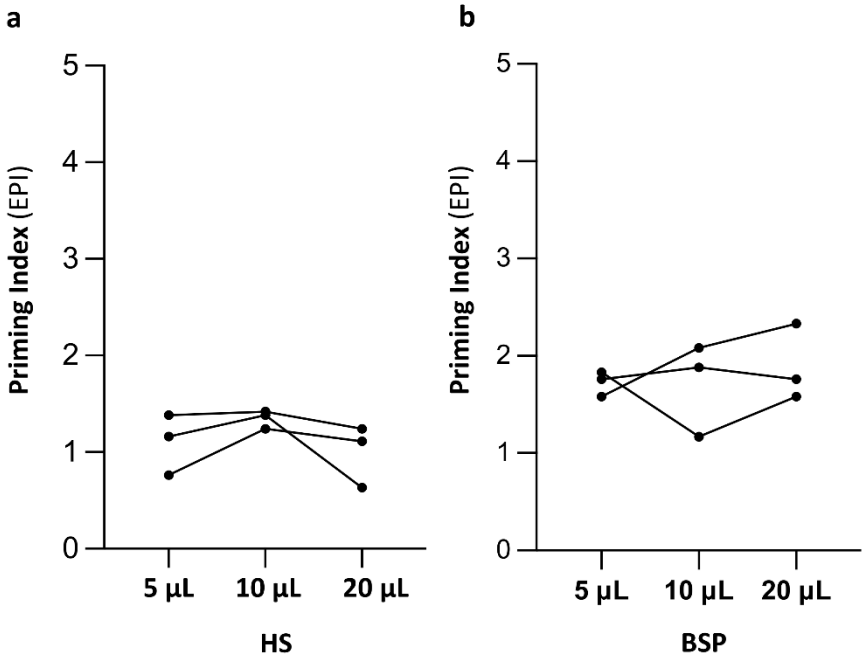



**Supplementary figure 4.**

Analysis of particles/plasma mL (**a**) and size distribution (**b**) in HS (n=10), BnSP (n=10) and BSP (n=23) by NTA. Expression of CD9, CD63 and CD81 in HS, BnSP and BSP by MACSPlex analysis.

NTA, Nanoparticle Tracking Analysis; HS, healthy subjects; BnSP, burn non-septic patients; BSP, burn septic patients.

*p<0.05; **p<0.01; ***p<0.0001.




**Supplementary figure 5.**

In vitro effects of different concentrations of EVs. When evaluating priming activity epinephrine (EPI) was added as secondary agonist. Evaluation of three different volumes: 5 µL, 10 µL, 20 µL of EVs isolated from plasma of 3 individual HS (**a**) and BSP (**b**) on platelet activity. HS, healthy subjects; BSP, burn septic patients.