

Kidnapper SA-Biosomes for alveolar macrophages targeting for managing pulmonary inflammation





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Dive into the details of the development and promising performance and see how SA-Biosomes are set to redefine therapeutic strategies for lung inflammation.

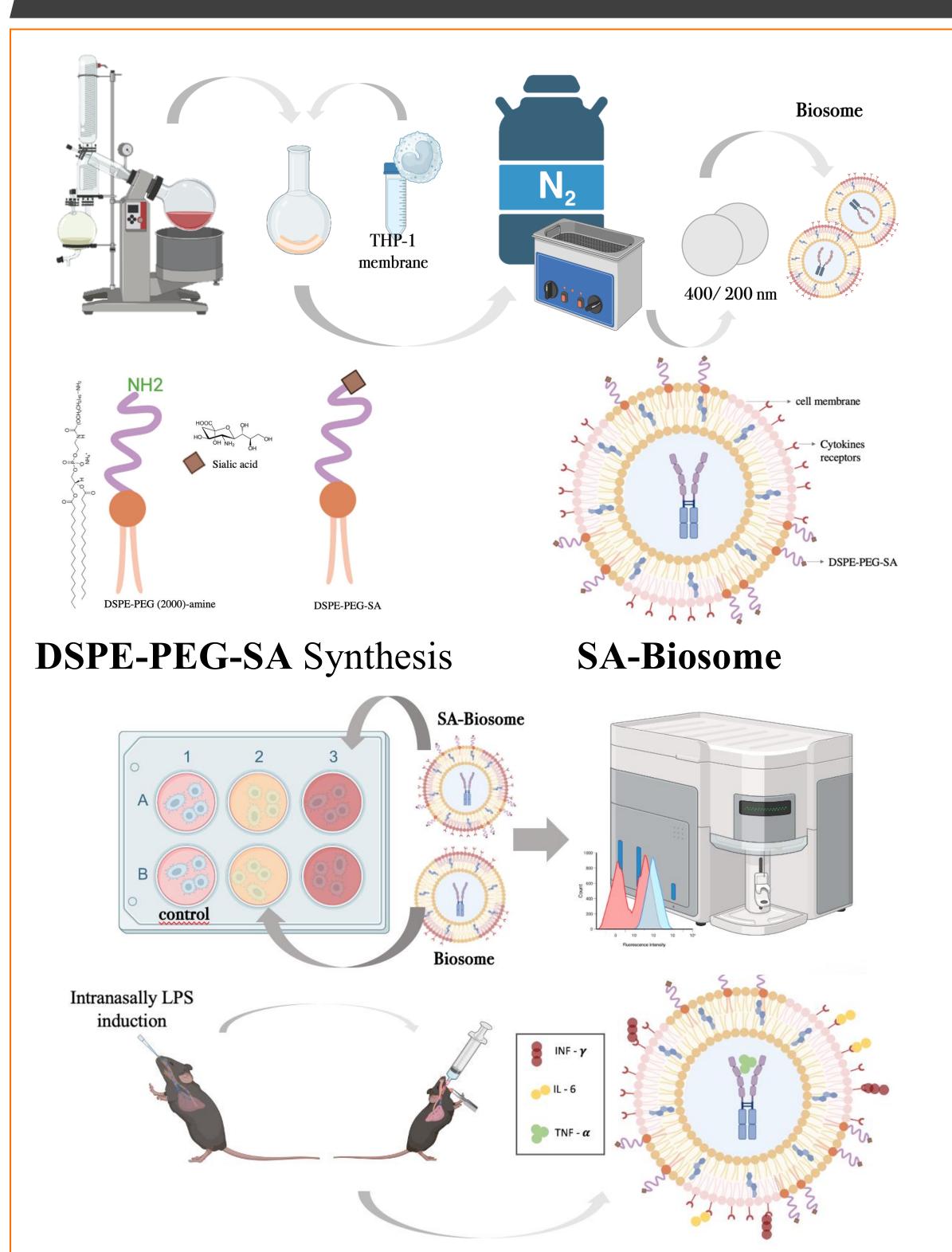


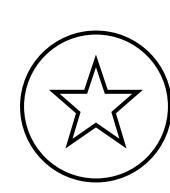
1. Introduction

- Pulmonary inflammation is a complex defensive process involving pro-inflammatory cytokines and immune cells.
- Pro-inflammatory cytokines are crucial mediators that amplify the inflammatory response.
- Biomimetic Nanoparticles show potential as a therapeutic approach for managing lung inflammation



2. Methods





Acknowledgements







3. Results

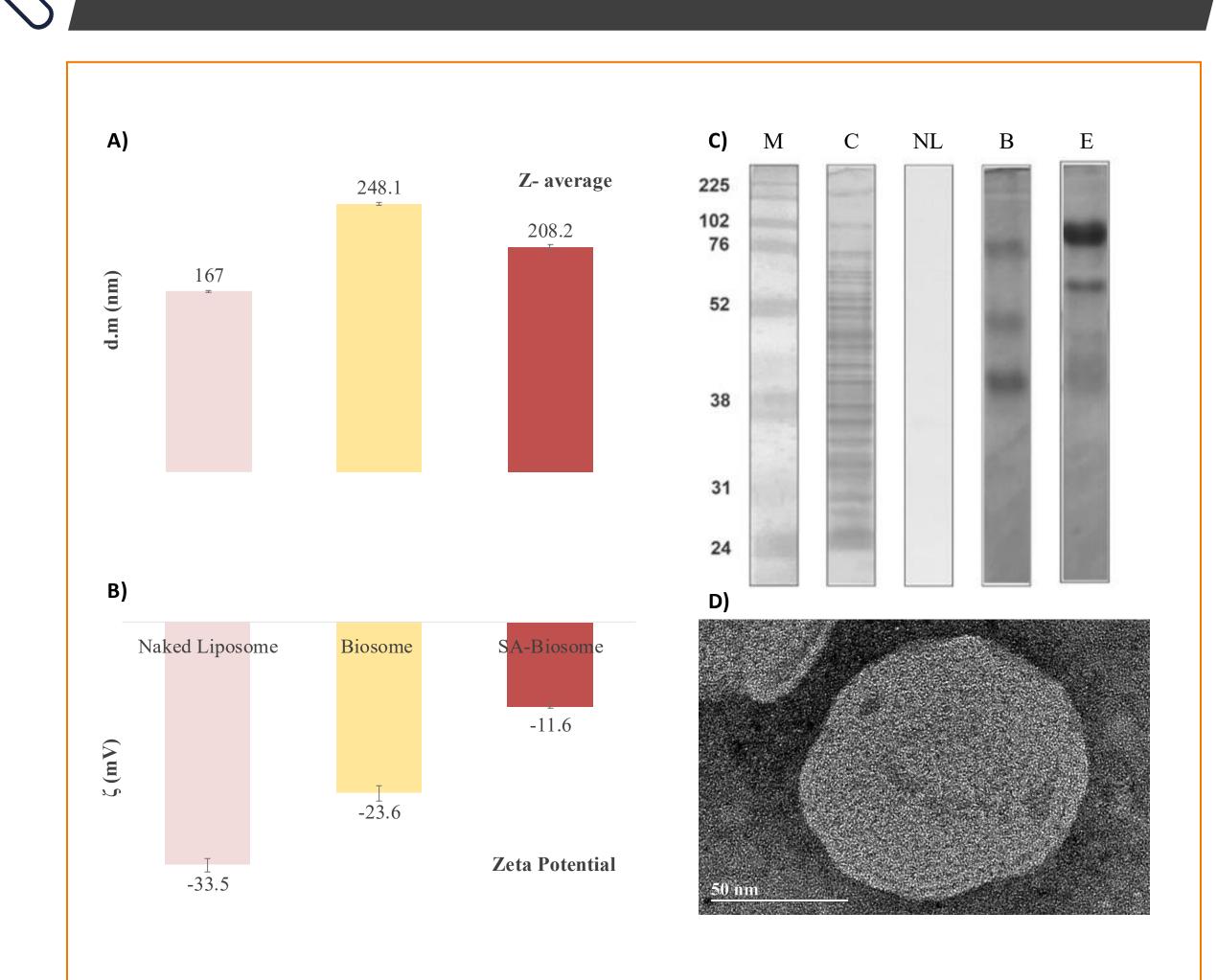


Fig.1 - Nanoparticles characterization. A) DLS measurements of hydrodynamic size and B) Surface zeta potential. C) SDS-PAGE electrophoresis of liposomes samples. M- molecular marker, C- cell membrane fractions protein, NL- Naked Liposome, B - Biosome and E-Etanercept. D) TEM of SA-Biosome.

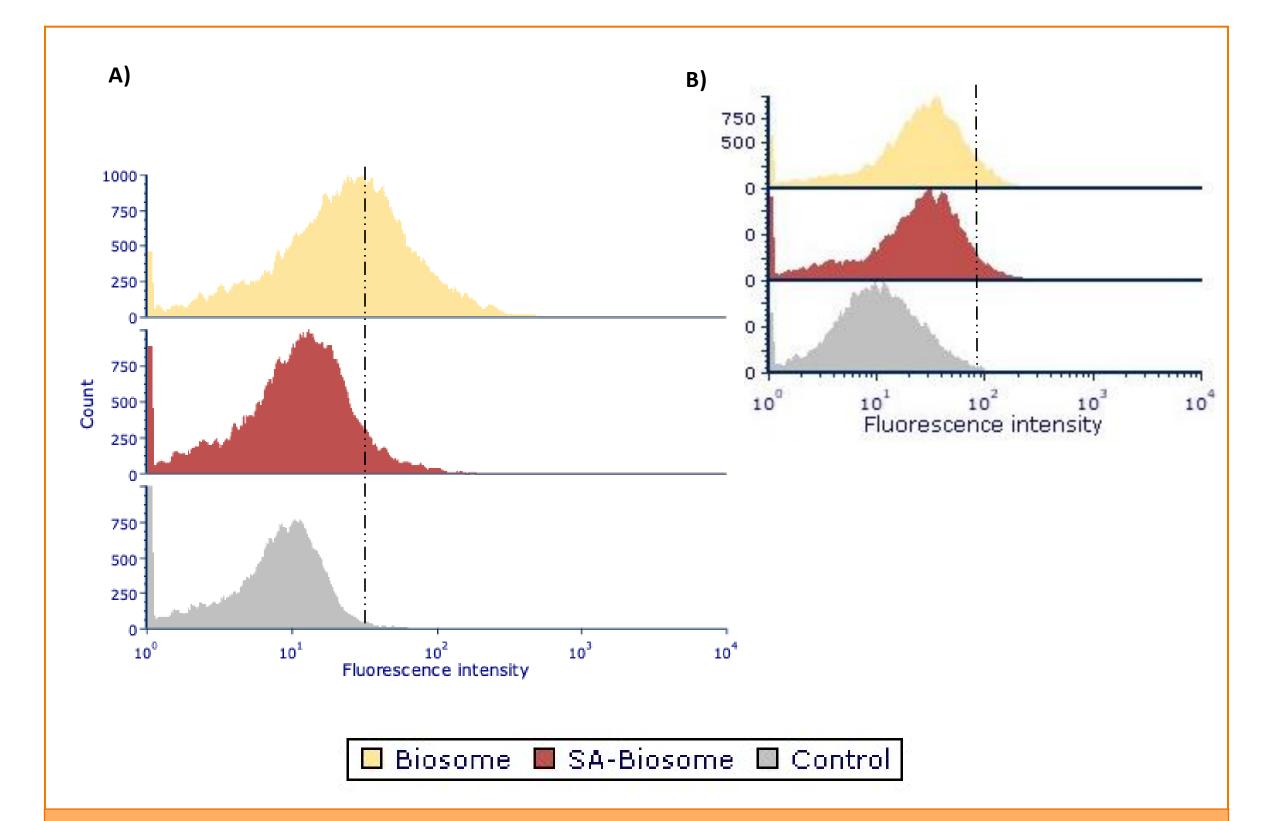


Fig.2 – cell uptake A) with and B) with out cell medium saturation with free sialic acid. Histograms represent the amount of fluorescence emitted by particles (Rod-PE) internalized by macrophages.

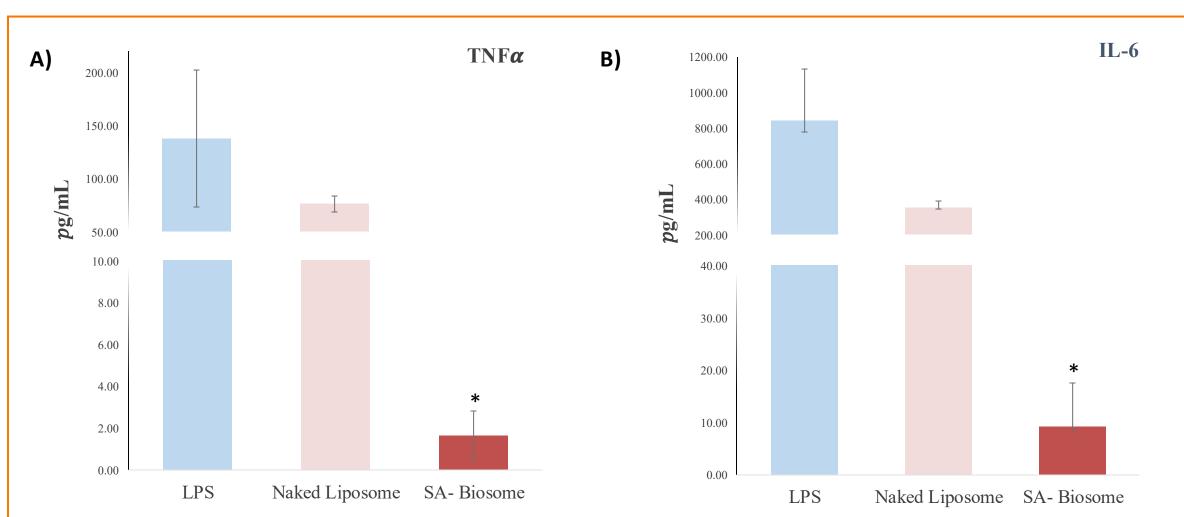


Fig.3 – A) TNF-α and B) IL-6 levels in BALF of C57BL/6 mice treated or not after LPS-induced inflammation. (n = 3). One-way ANOVA with Tukey's post hoc test; p < 0.05.