

Pulmonary Hazards of Nanoplastic Particles: A Study Using Polystyrene in *in Vitro* Models of the Alveolar and Bronchial Epithelium

Sara Michelini ^a, Safaa Mawas ^b, Ema Kurešepi ^a, Francesco Barbero ^c, Katarina Šimunović ^d, Dorian Miremont ^b, Stéphanie Devineau ^b, Martin Schicht ^e, Victor Ganin ^f, Charlotte Izabelle ^h, Øyvind P Haugen ^g, Anani Komlavi Afanou ^g, Shan Zienolddiny-Narui ^g, Katharina Jüngert ^e, Neža Repar ^a, Ivana Fenoglio ^c, Barbara Šetina Batič ⁱ, Friedrich Paulsen ^e, Ines Mandić-Mulec ^d, Sonja Boland ^b, Andreja Erman ⁱ, Damjana Drobne ^{a+}

^a University of Ljubljana, Biotechnical faculty, Department of Biology, Jamnikarjeva ulica 101, 1000 Ljubljana, Slovenia

^b Université Paris Cité, CNRS, Unité de Biologie Fonctionnelle et Adaptative, F-75013 Paris, France.

^c University of Torino, Department of Chemistry, Laboratory of Toxicity and Biocompatibility of Materials, Torino, Italy

^d University of Ljubljana, Biotechnical faculty, Department of Microbiology, Jamnikarjeva ulica 101, 1000 Ljubljana, Slovenia

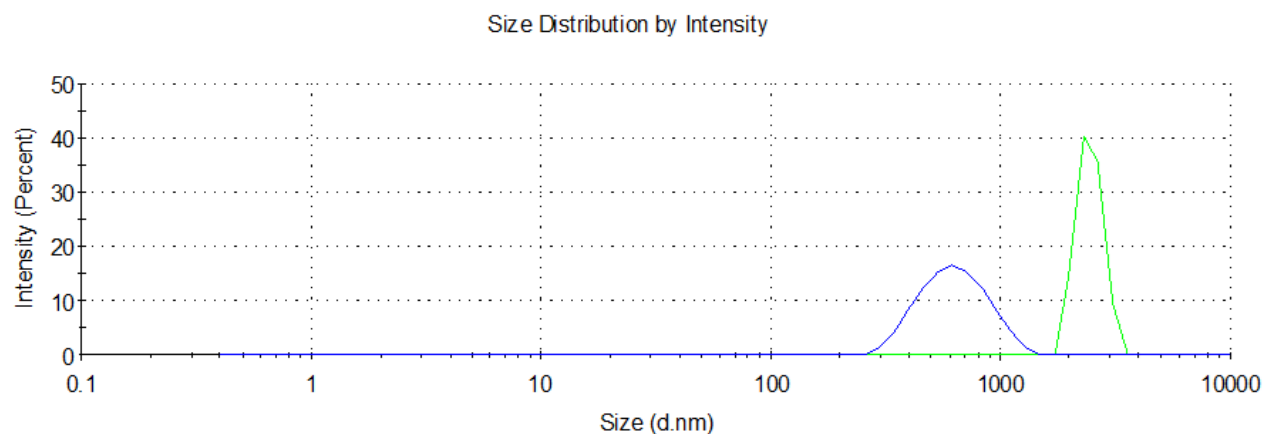
^e Friedrich-Alexander-University of Erlangen-Nürnberg, Institute of Functional and Clinical Anatomy, Erlangen, Germany

^f Institute of Metals and Technology, Lepi pot 11, 1000 Ljubljana, Slovenia

^g STAMI, National Institute of Occupational Health, Gydas Vei 8, 0363 Oslo, Norway

^h Université Paris Cité, CNRS UAR612, Inserm US25, Cellular and Molecular Imaging facility, F-75006, Paris, France.

ⁱ University of Ljubljana, Faculty of Medicine, Institute of Cell Biology, Vrazov trg 2, 1000 Ljubljana, Slovenia



Additional File 1: DLS graph showing the impact of FBS-free medium on particle aggregation and sedimentation. Blue: DLS profile of particles incubated for 24h at 37°C in complete culture medium. Green: DLS profile of particles incubated for 24h at 37°C in serum-free culture medium.