## **Supplementary material**

The empirical distributions (histogram) of aerodynamic diameters as measured by ELPI<sup>TM</sup> are presented in Figure 1-6. All the results are the arithmetic mean values of three repetitions. Both X-axis and Y-axis are displayed on a logarithmic scale.

Figures 1 and 4 have been discussed in the text. The other figures are presented here for the sake of completeness.

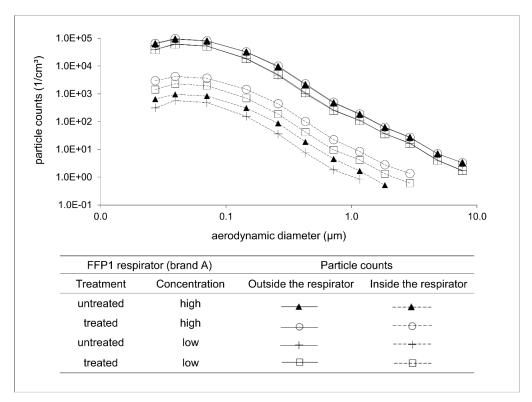


Fig. 1 Particle size distribution of FFP1 respirator from brand A

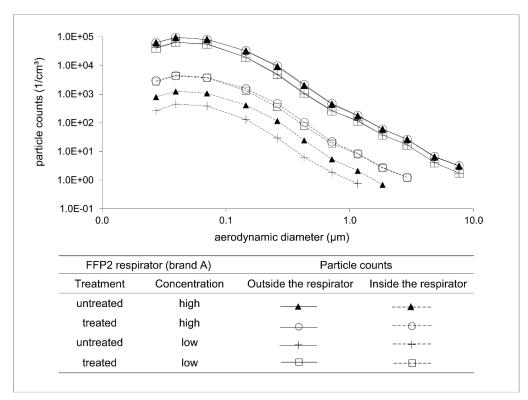


Fig. 2 Particle size distribution of FFP2 respirator from brand A

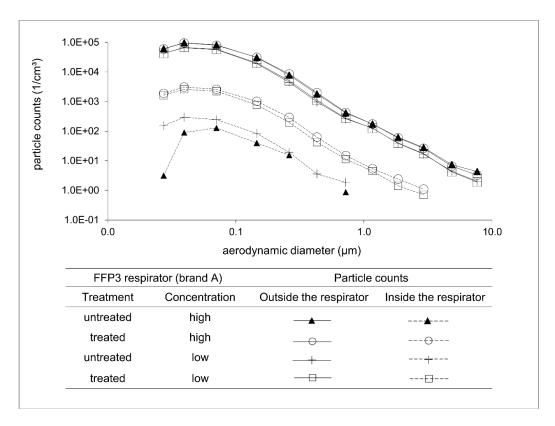


Fig. 3 Particle size distribution of FFP3 respirator from brand A

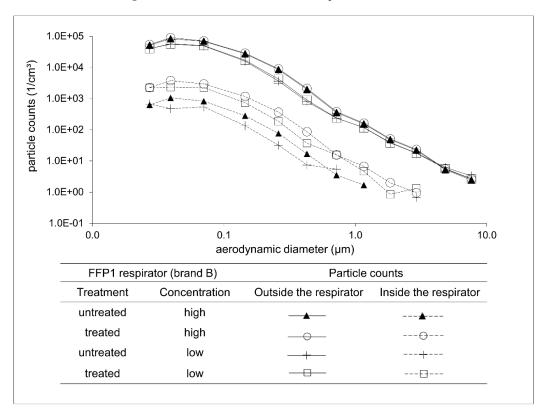


Fig. 4 Particle size distribution of FFP1 respirator from brand B

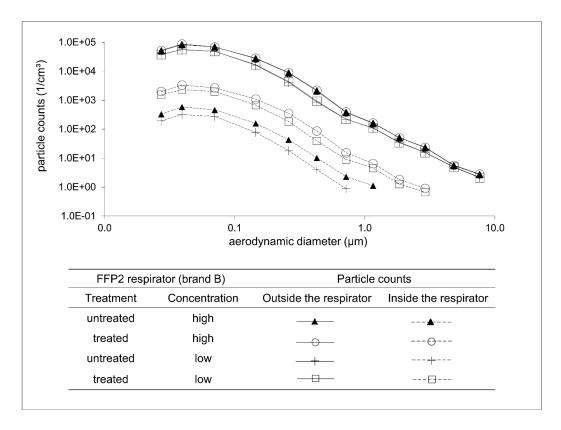


Fig. 5 Particle size distribution of FFP2 respirator from brand B

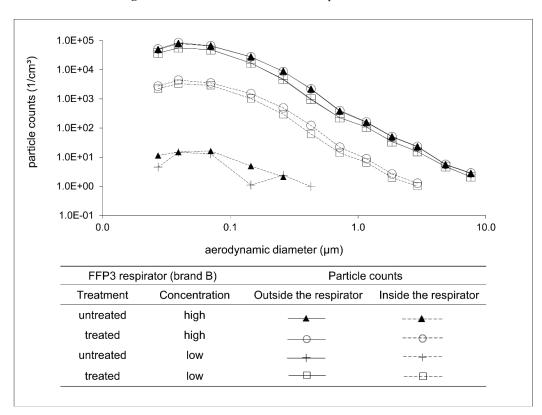


Fig. 6 Particle size distribution of FFP3 respirator from brand B