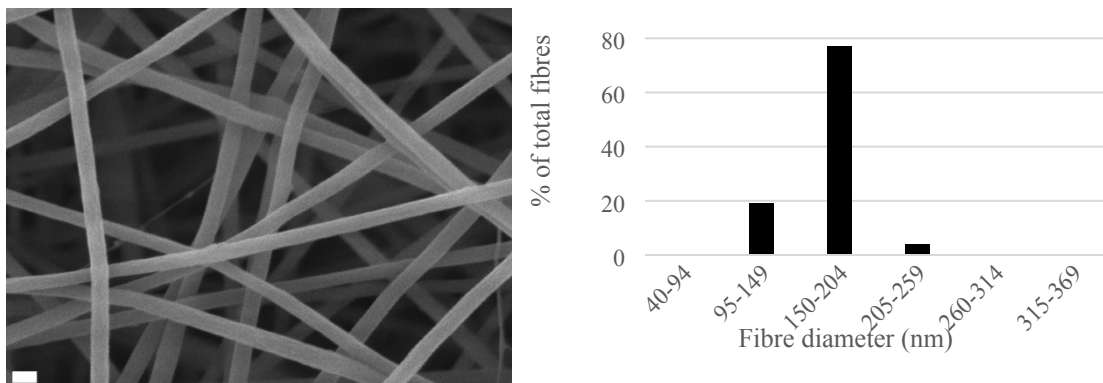
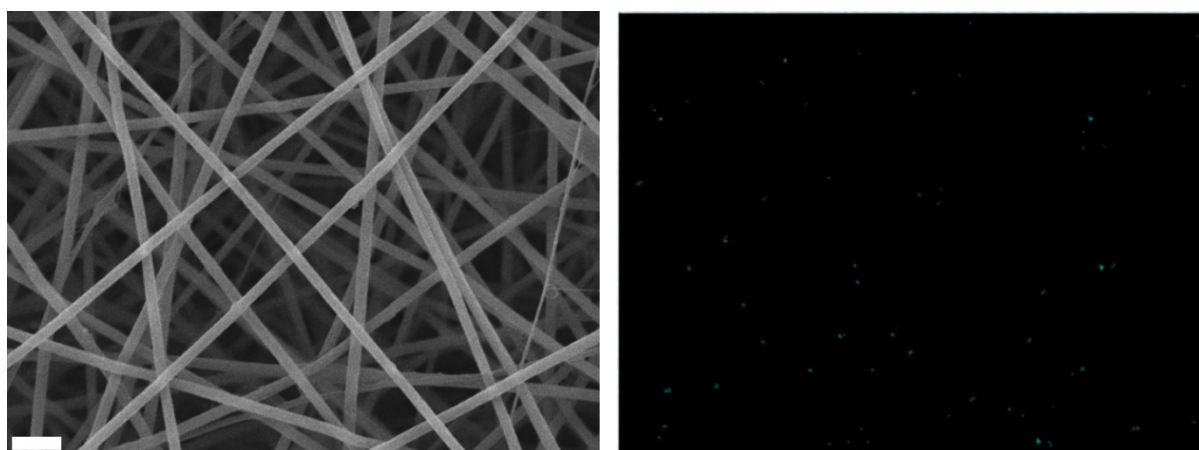


**Supporting Information:** Designing responsive dressings for inflammatory skin disorders; encapsulating antioxidant nanoparticles into biocompatible electrospun fibres.

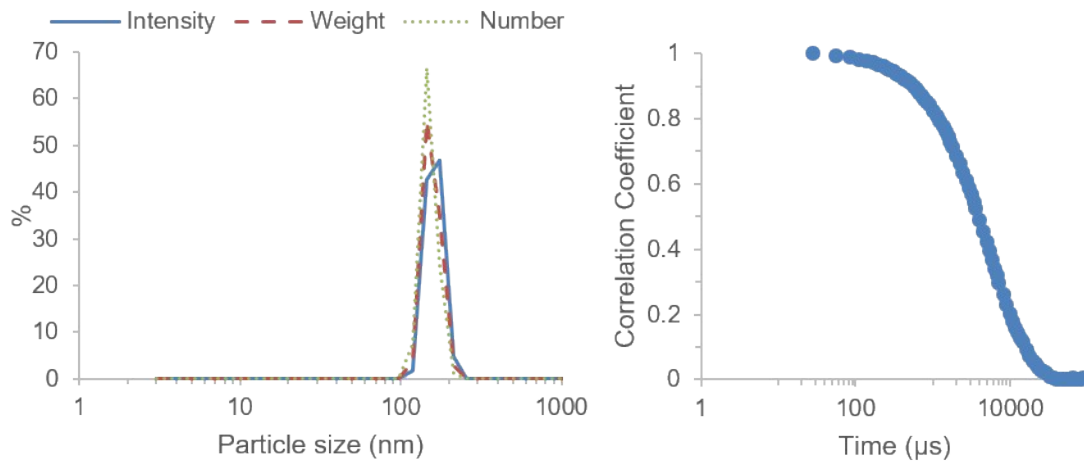
Charles Brooker<sup>a</sup>, Richard d'Arcy<sup>b\*</sup>, Elisa Mele<sup>a</sup> and Helen Willcock<sup>a\*</sup>



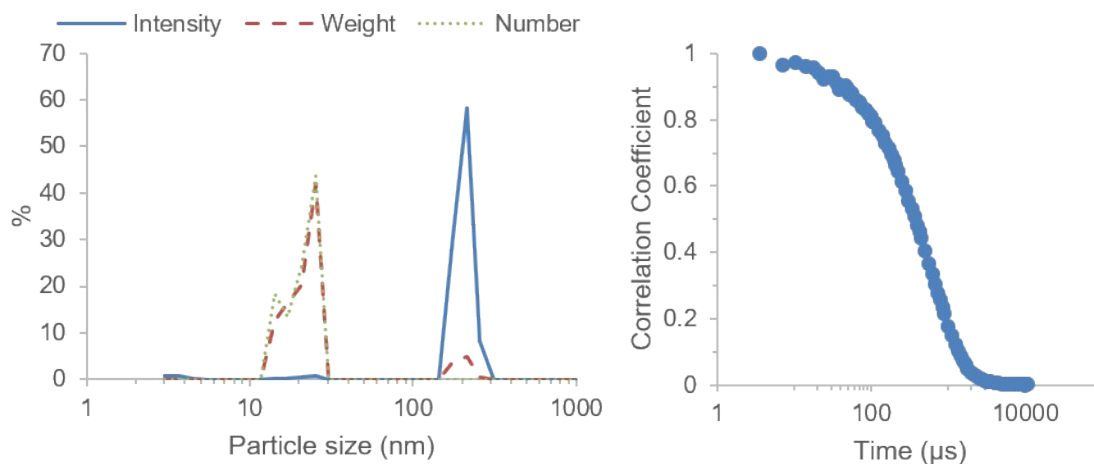
**Figure S1.** Micrograph and fibre diameter histogram of PEO fibres demonstrating homogenous fibres. Scale bar 250 nm.



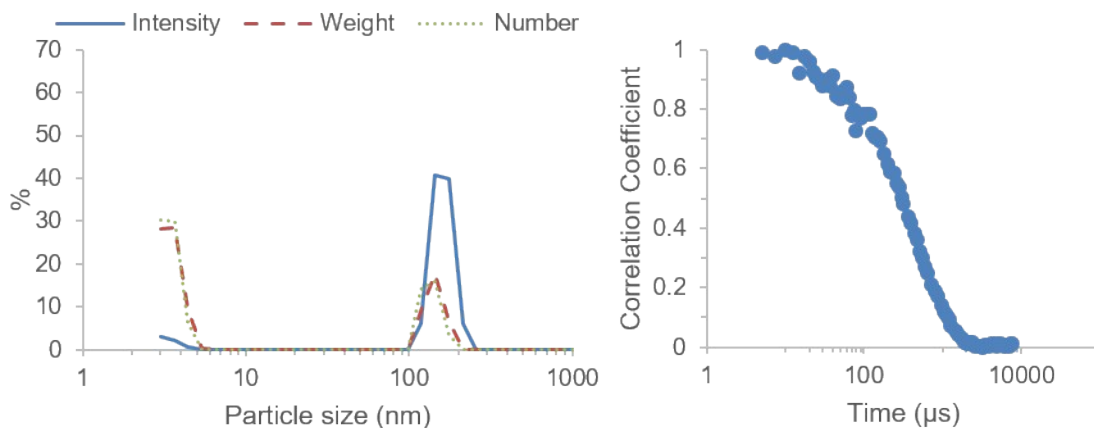
**Figure S2.** Micrograph of PEO-based fibres (left); EDS sulfur map of the same PEO-based fibres (showing no sulfur present). Scale bar 1  $\mu$ m.



**Figure S3. Particle size distribution (left) and associated autocorrelation curve from DLS (right) of 0.1 wt% native 150 nm PPS particles.**



**Figure S4. Particle size distribution (left) and associated autocorrelation curve from DLS (right) of PEO/150 nm PPS-NP blend before being electrospun, containing 0.1 wt% PPS-NPs.**



**Figure S5. Particle size distribution (left) and associated autocorrelation curve from DLS (right) of resolubilised PEO/150 nm PPS-NP fibres, containing 0.1 wt% PPS-NPs.**