



Supplementary file 5. The hysteresis curves for PDMS A10 with 300% oil surrogate liver resulted in an accurate characterisation of the ultimate tensile strength (UTS). Vectors in this graph show force (N) versus travel (mm) for five different specimens during multi-axial compression up to a maximum of 5N. Where vectors fall below 0 indicates permanent deformation (bagging) of specimens occurs, typical behavioural characteristics of most soft tissue and elastomers. Specimens had 23.3mm of unrecovered deformation between the first and the last cycle, when tested at a maximum force of 5N in multi-axial compression. Also, to reach 5N compression force the probe must travel an average of 42.5mm between the first and last cycle.