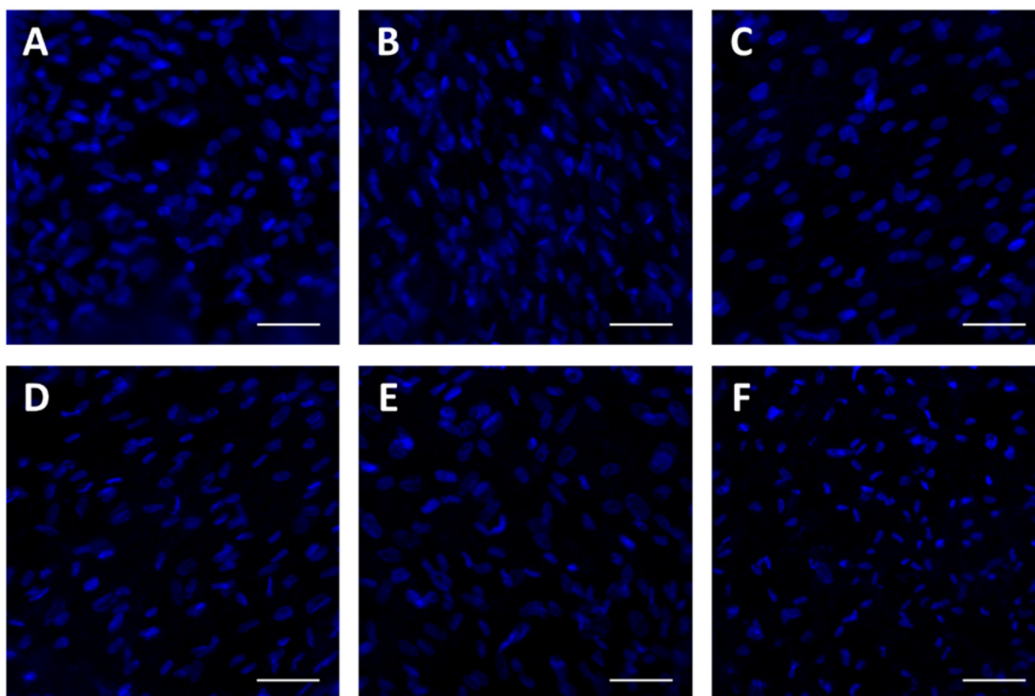
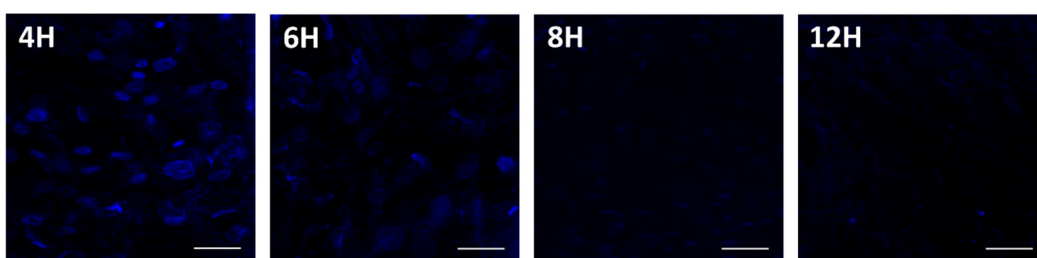


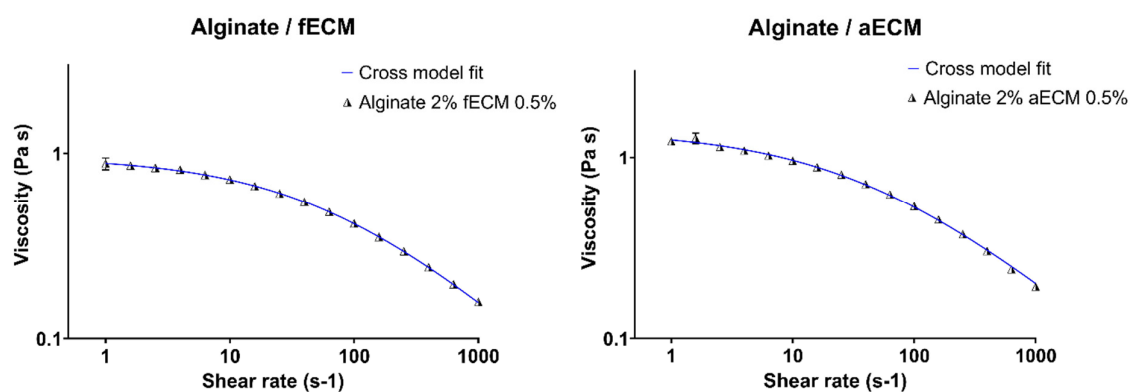
Supplementary Figures:



Supplementary Figure S1: DAPI staining of cell sheets subjected to different treatments. scCO₂ exposure at A) 20 MPa for 1h and B) 25 MPa for 2h; C) scCO₂/ethanol exposure at 25 MPa for 2h; scCO₂/Dehypon® exposure at D) 25 MPa and E) 30 MPa for 1h30m and F) 3h30m. Scale bar is of 100 μ m.



Supplementary Figure S2: DAPI staining of cell sheets immersed in 2% (v/v) Dehypon solutions for different incubation times. Scale bar is of 100 μ m.



Supplementary Figure S3: Cross model-fitting of viscosity profiles for Alg/ECM blends

Supplementary Table S1. Values of zero-shear viscosity (η_0), α_c , m and R^2 after cross model-fitting of Alg/ECM blends viscosity profiles.

	η_0	α_c	m	R^2
Alg 2 % / 0.5% fECM	0.9574	0.01583	0.5934	0.9807
Alg 2% - 0.5% aECM	1.410	0.02522	0.5577	0.9865