Three-dimensional stable alginate-nanocellulose gels for biomedical applications: towards tunable mechanical properties and cell growing

Priscila Siqueira a, Éder Siqueira b, Ana Elza de Lima b, Gilberto Siqueira c, Ana Délia Pinzón Garcia b, Ana Paula Lopes b, Maria Esperanza Cortés Segura d, Augusta Isaac e, Fabiano Vargas Pereira b*, Vagner Roberto Botaro f*

Figure S1: Conductometric titration curves for TEMPO-oxidized cellulose nanofibers (CNFT) and TEMPO-oxidized cellulose nanocrystals (CNCT)
Figure S2: Zeta potential (ζ) measurements obtained by electrophoretic mobility for CNC, CNCT, CNF and CNFT.

Figure S3: SEM images of the cross-section for crosslinked gels (a) alginate/CNC 50 wt% and 500 x magnification; (b) alginate/CNF 50 wt% 500 x magnification. The inset represents a magnification of 1500 x.
Figure S4: Pore sizes distribution and standard mean values obtained by SEM micrographs for CNC, CNCT, CNF and CNFT.
Figure S5: Influence of the nanocellulose concentration on the thermal stability of aginate-gels: (a) CNC (10, 36 and 50 wt%); (b) CNCT (10, 36 and 50 wt%); (c) CNF (10, 36 and 50 wt%); (d) CNFT (10, 36 and 50 wt%).