



Supporting Information

for

Electrospun polysuccinimide scaffolds containing different salts as potential wound dressing material

Veronika Pálos, Krisztina S. Nagy, Rita Pázmány, Krisztina Juriga-Tóth, Bálint Budavári, Judit Domokos, Dóra Szabó, Ákos Zsembery and Angela Jedlovszky-Hajdu

Beilstein J. Nanotechnol. **2024**, *15*, 781–796. [doi:10.3762/bjnano.15.65](https://doi.org/10.3762/bjnano.15.65)

Additional experimental data

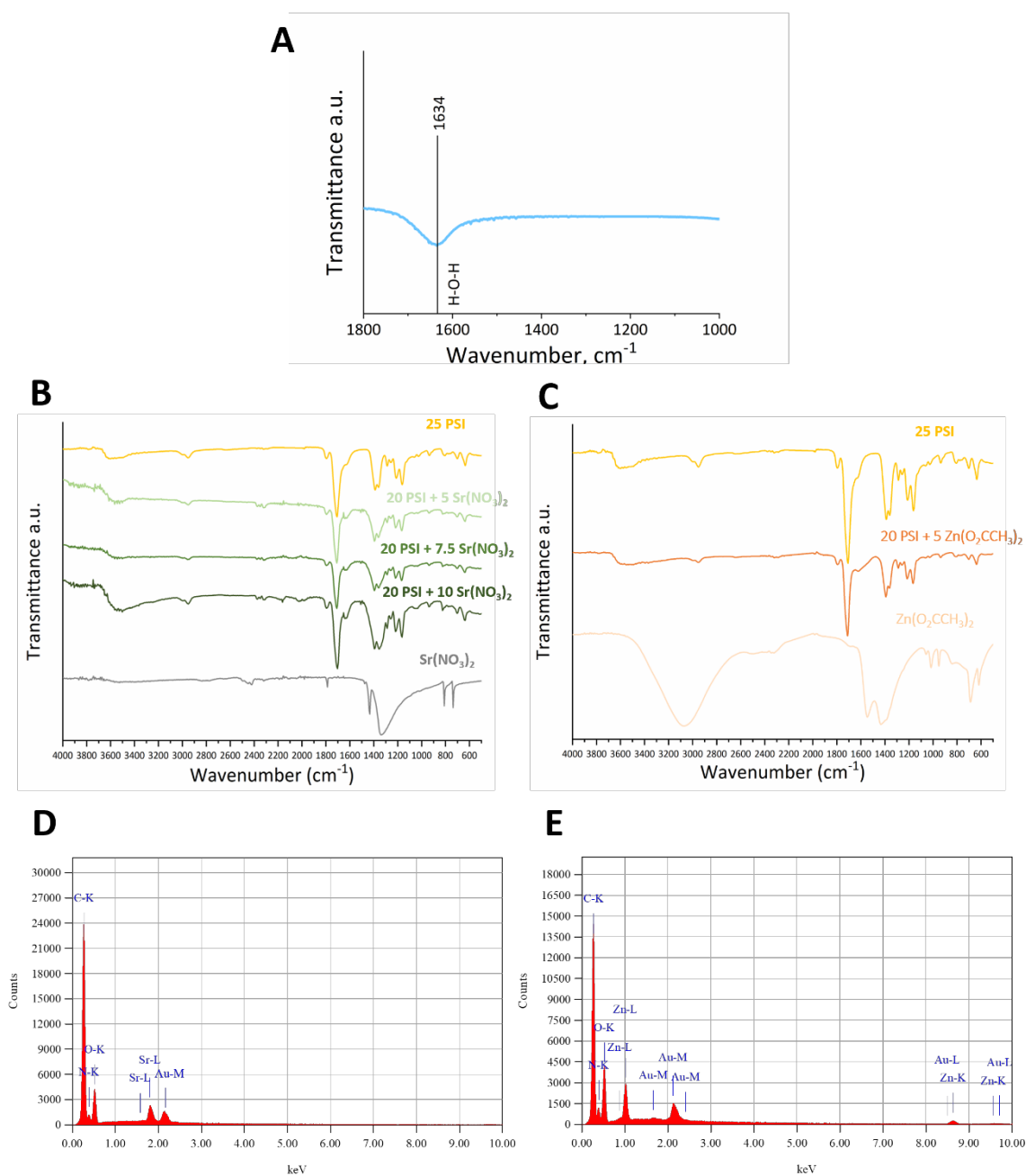


Figure S1: A) The FTIR spectra of water with the characteristic H–O–H bending vibration peak at 1634 cm^{-1} . B) FTIR spectra of the $\text{Sr}(\text{NO}_3)_2$ salt, scaffolds containing this salt, and 25 PSI scaffold between 4000 and 500 cm^{-1} . C) FTIR spectra of the $\text{Zn}(\text{O}_2\text{CCH}_3)_2$ salt, scaffold containing this salt, and 25 PSI scaffold between 4000 and 500 cm^{-1} . D) EDX spectrum of the 20 PSI + 5 $\text{Sr}(\text{NO}_3)_2$ scaffold E) EDX spectrum of the 20 PSI + 5 $\text{Zn}(\text{O}_2\text{CCH}_3)_2$ scaffold.

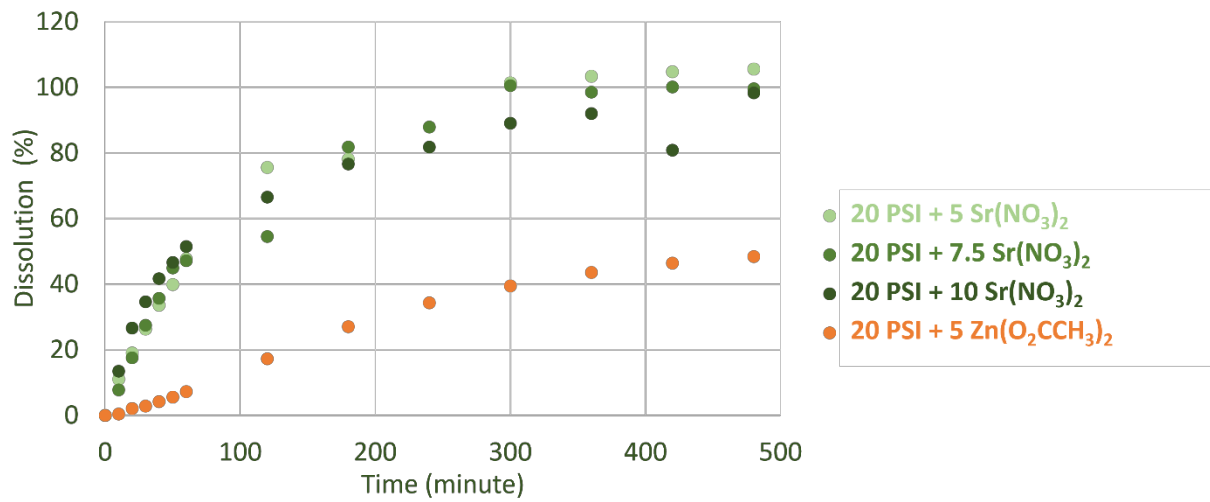


Figure S2: The dissolution of the scaffolds with different salt content in distilled water for 8 h.

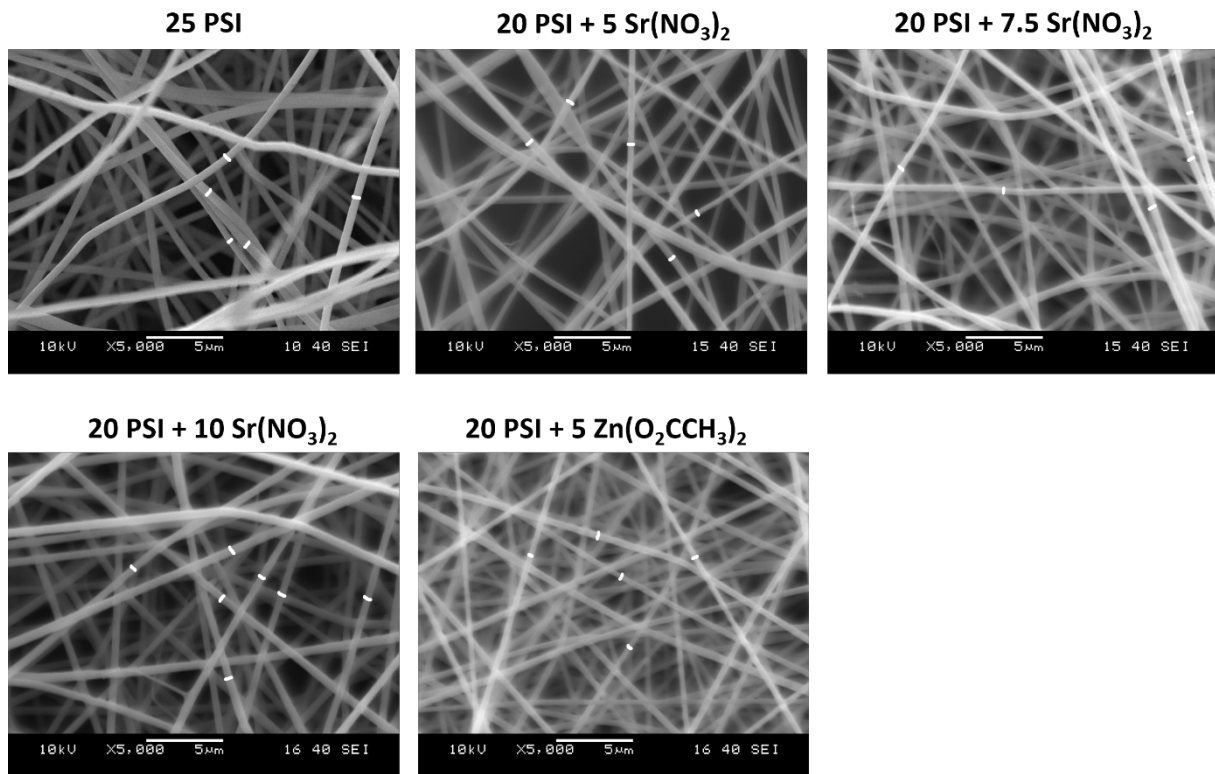


Figure S3: The process of fiber diameter determination by ImageJ.

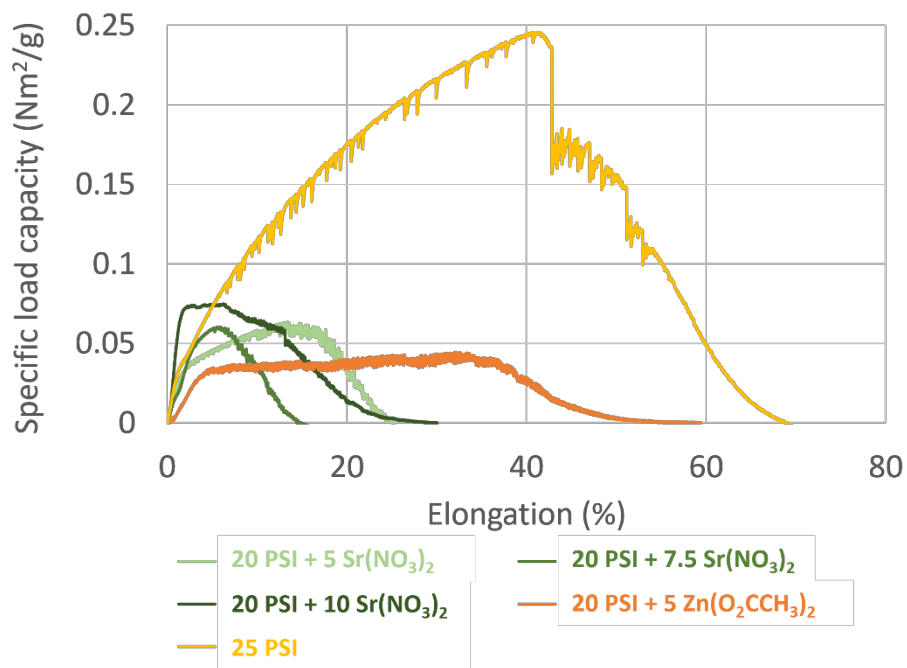


Figure S4: Elongation-specific load capacity graphs of different scaffolds.

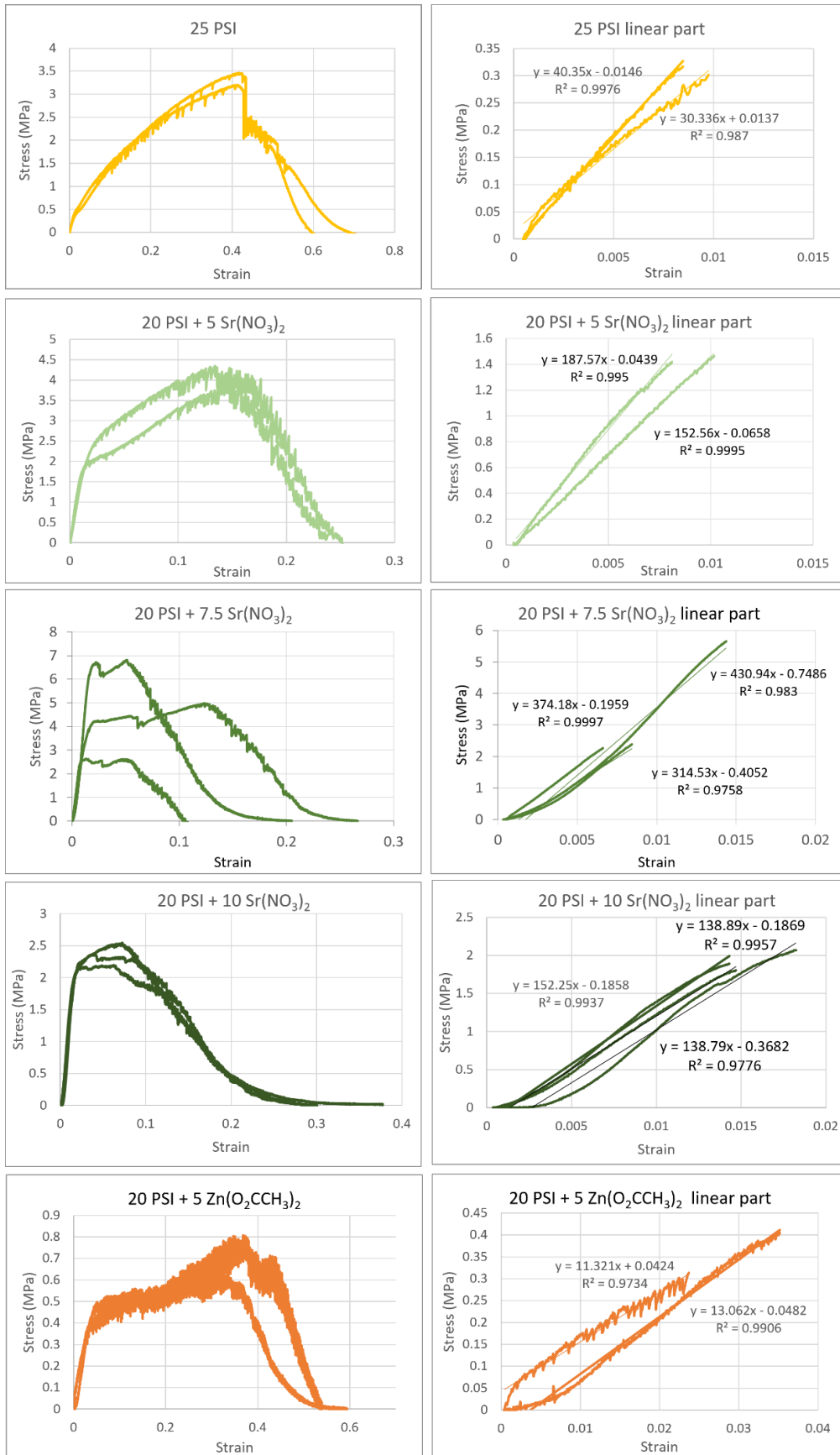


Figure S5: Typical stress–strain curves of 25 PSI and PSI + salt scaffolds, and the determination of the Young’s modulus from the linear part of the curve.

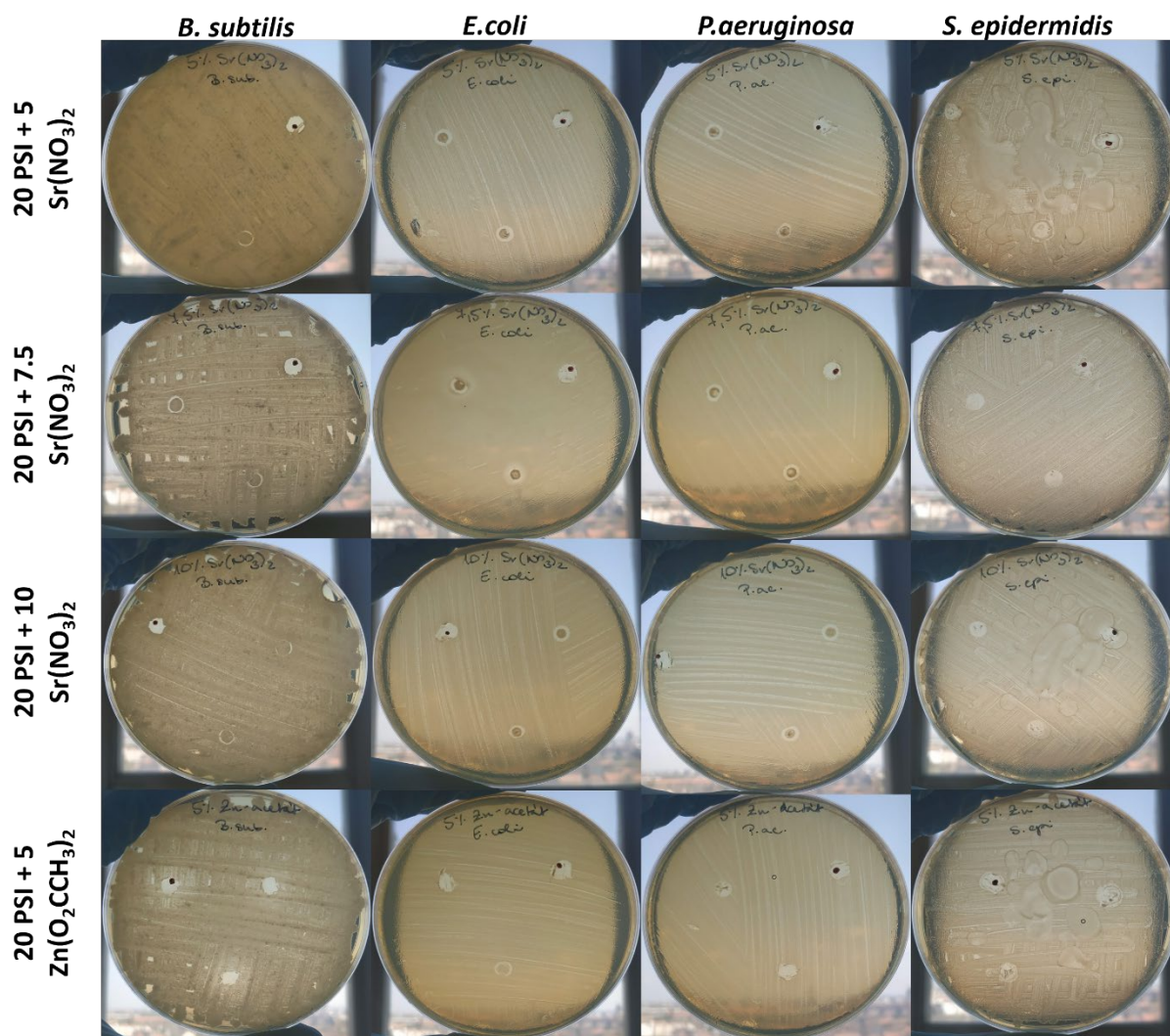


Figure S6: The inhibition and diffuse zones of salt-containing scaffolds on four different bacteria lawns.

MG-63 cell line

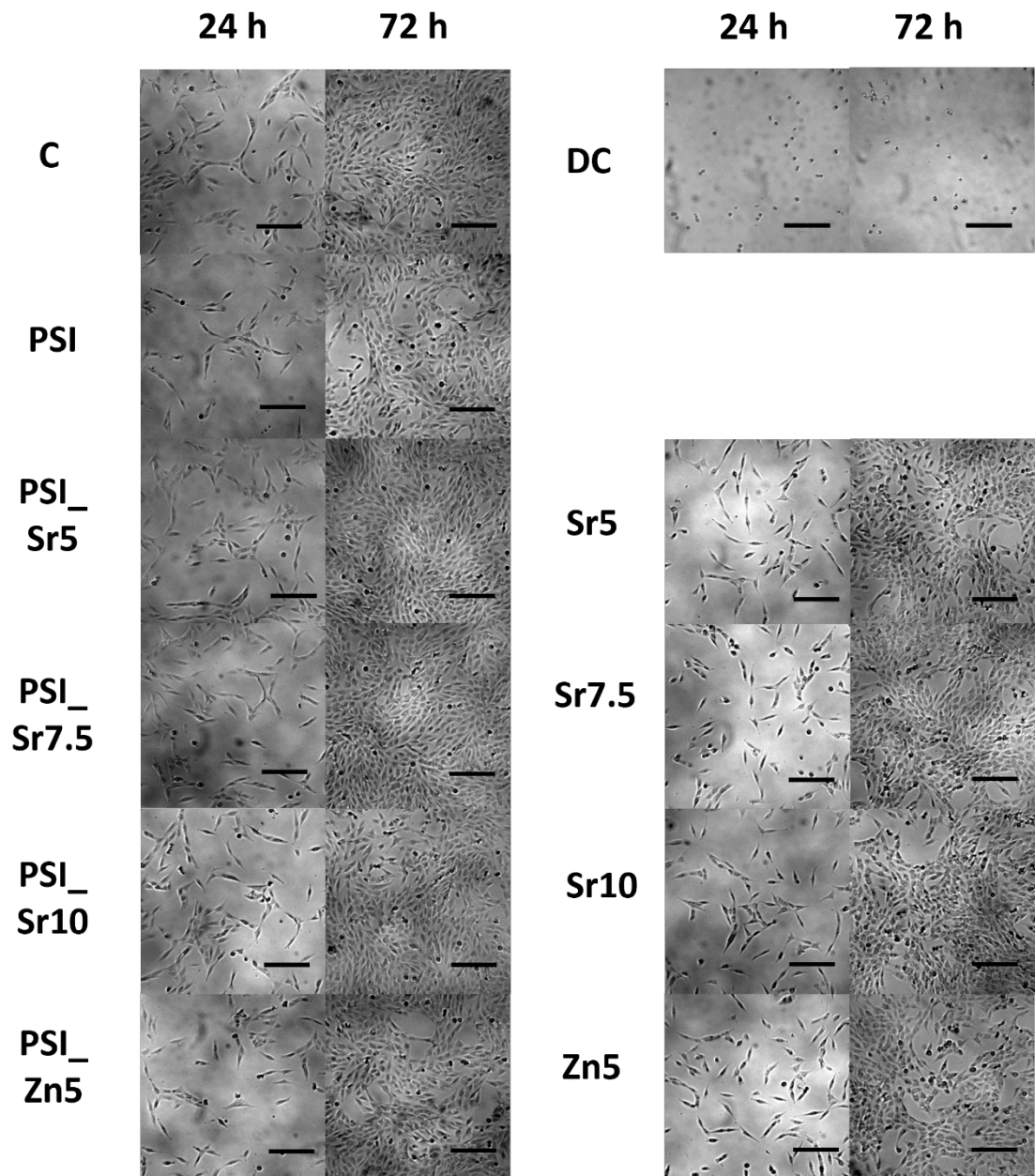


Figure S7: Phase-contrast microscopy images of the MG-63 cell line after treatment for 24 and 72 h with different concentrations of salts and extract of the scaffolds. The scale bars indicate 100 μm.

155BR cell line

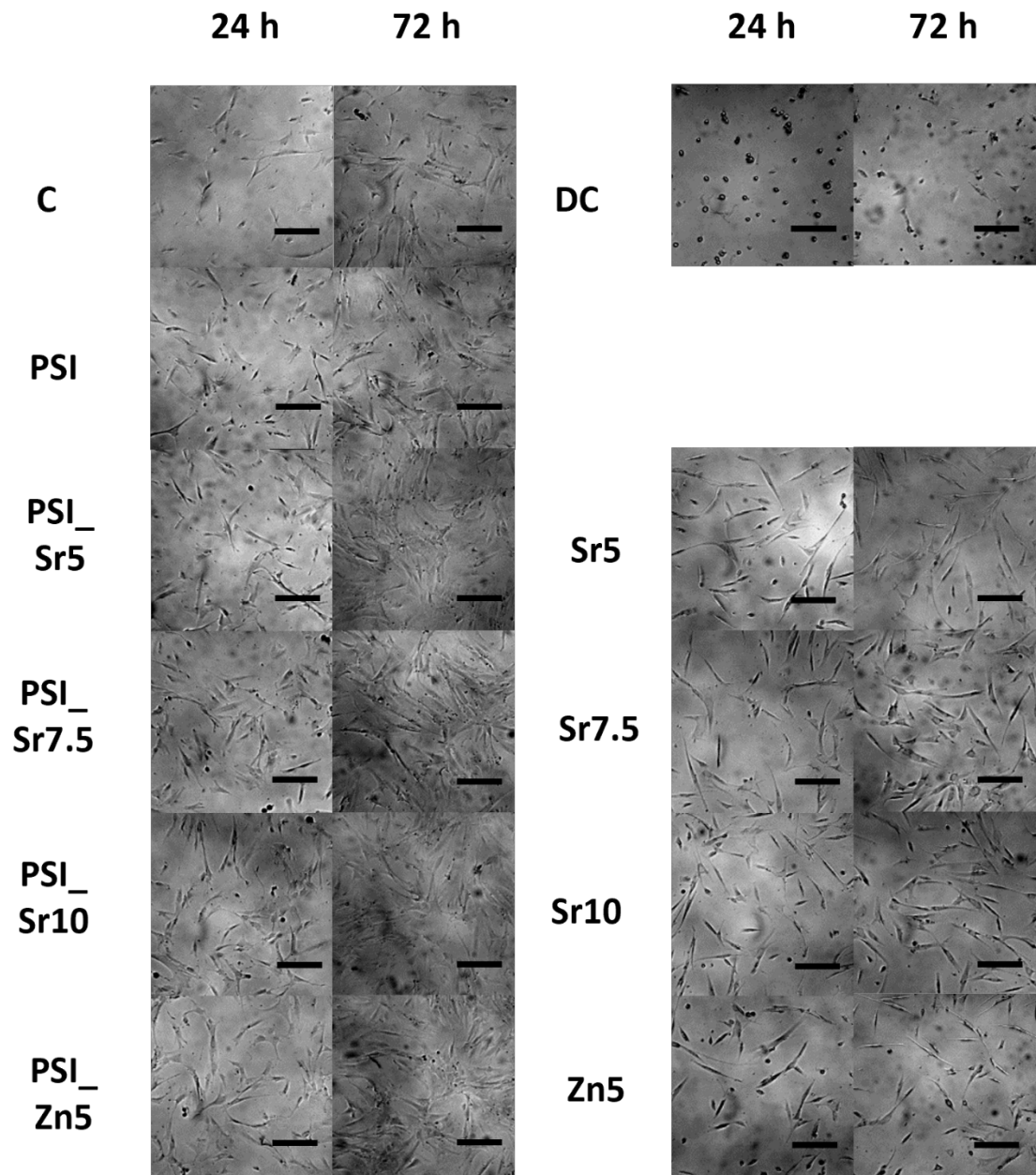


Figure S8: Phase-contrast microscopy images of the 155BR cell line after treatment for 24 and 72 h with different concentrations of the salts and extract of the scaffolds. The scale bars indicate 100 μm.