

Abstract

Title: Methodological detection solution scaffolds response to mechanical stress, depending on the degree of hydration

Objectives: Determining the extent of lateral deformation u scaffolds made of PVA polymer electrospinning technique.

Identify the extent of differences in transverse deformation for different groups of nanofiber scaffolds made of PVA polymer electrospinning technique.

Methods: Research scaffolds, we used a measuring device μ -tester, which has two jaws. For the measurement, we chose uniaxial tension test in μ -tester and record the fluorescence microscope was used with HD camera Olympus 320 for online video recording.

Results: The results of this study showed that the ratio of the samples U: L and crosslinking time affects the degree of lateral deformation of the samples scaffolds.

Samples scaffolds are compressible, some groups even reached the limits of incompressibility 0.5 Poisson's ratio.

Keywords: Poisson, Poisson's ratio, scaffold, nanofiber scaffold, scaffold hydrated, electrospun scaffold, lateral deformation