

HIGHLIGHT

Vienna, November 10th, 2014

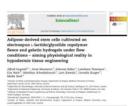


Figure 1: Results were published in the scientific journal Burns

New cultivation techniques for hypodermis tissue engineering

In this study we tested electrospun poly(L-lactide-co-glycolide) (P(LLG)) and gelatine hydrogels together with adipose-derived stem cells (ASCs) in a perfusion bioreactor system under medium flow for a new approach in soft tissue engineering.

ASCs could be cultivated on P(LLG) scaffolds under static conditions and in gelatine hydrogels under flow conditions and showed good cell viability as well as the potential to differentiate. These results should be a next step to a physiological three-dimensional construct for soft tissue engineering and regeneration.



Figure 2: Perfusion reactors

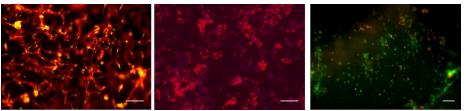


Figure 3: Morphology, adipogenesis and viability of adipose-derived stem cells on electrospun scaffolds and in hydrogels

All results, more images, a concrete method description and more background to this study can be found here:

http://www.burnsjournal.com/article/S0305-4179(14)00219-8/pdf





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