

Generation of the hypodermis in a vascularized three layered skin substitute

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Abstract

This presentation will give an overview on the ArtiVasc3D project a 7th framework EU project. The ArtiVasc3D project aims to generate a vascularized 3D skin substitute consisting of epidermis, dermis and hypodermis. To generate the three layered skin a construct of hydrogels and electrospun matrices is produced and seeded with adipose derived stem cells, adipocytes, fibroblasts and keratinocytes. Cells are also cultivated in a bioreactor to mimic physiological conditions before connecting them to the vascularization system. The presentation will also explain the development of the whole project and its collaborations.