

33. Title: Acellular artificial skin substitute for second degree burn

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Keywords: Skin substitute, skin scaffolds, Biodegradable, Biocompatible, acellular

Domain: Healthcare (Medical Device)

Summary: The technology relates to novel bi-layered structured acellular artificial skin substitute or scaffolds developed to prevent scar formation. It is a biodegradable and biocompatible substitute. It mimics the native extracellular matrix (ECM) properties and exhibits excellent adhesive and wound healing properties. The present technology is an acellular artificial skin substitute comprising a cross-linked upper layer, and a non-cross-linked bottom layer comprising bioactive and biopolymer.

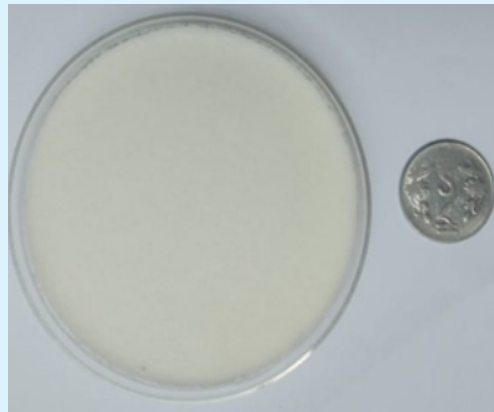


Image: Acellular Skin Substitute

Advantages:

- » The acellular artificial skin substitute of the present invention is a biodegradable, biocompatible and Gamma sterilized
- » It mimics the native extracellular matrix (ECM) properties and exhibits excellent wound healing properties and can be used in trauma care
- » It is patient complaint as it prevents scar formation
- » Non-immunogenic and Non-irritant (does not result in erythema or edema)
- » Easy applicability and cost effective

Applications: Healthcare

Scale of Development: Prototype developed, Preclinical studies completed; CDSCO approval for Phase 1 trials

Technology Readiness Level: 5

IP Status: Indian Patent Application 201911038914, US Patent Application 17/764,523