Results:

The results demonstrated an increase in re-epithelisation rate of 3D printed skin compared to healing by secondary intention in the porcine model. The outcomes from this study have enabled the translation to a first in human clinical trial; a safety study to deliver keratinocytes within a biomaterial matrix to a surgically generated wound with promising preliminary findings.

Conclusions:

The results from this pre-clinical and clinical study demonstrated its safety and efficacy in treating controlled and non-complicated wounds. The use of this delivery system in tissue regeneration is a promising step in the advances for skin tissue engineering.

O12.5 Multispectral Imaging and Assessment of Burns Healing Potential: A Prospective Real-World Study to assess the DeepView Snapshot Imaging Platform

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Oral presentations 12—Wounds & Psychosocial and Psychiatry, 5 September 2025, 08:30–10:00

Aim:

Assessing the predictive value of the DeepView Snapshot Imaging Platform (DVS) in evaluating burn depth and predicting healing.

Introduction:

Burns depth and subsequent healing potential is an essential part of clinical assessment and is affected by the examiner's expertise and the dynamic nature of burn wounds. Misdiagnosis can result in unnecessary surgical or delayed definitive management. DVS combines multispectral imaging with an Al predictive model to assess burn depth and predict healing.

Methods:

Authors performed a prospective study in a single centre UK Burns Service. Adults attending with a thermal burn within 7 days of injury were included. Exclusions included specialist areas and patients undergoing excision and grafting. Clinician assessment of depth was compared to the DVS. Healing was defined as greater than 95% healed within 21 days.

Results:

55 patients with 98 regions of interest were included. DVS had a negative predictive value (NPV) of 0.85, Sensitivity of 0.58 and Specificity of 0.86 ($p < 0.001$). Clinician assessment had a NPV of 0.84, Sensitivity of 0.58 and Specificity of 0.79 ($p = 0.001$). There was no statistical different difference in NPV, Sensitivity or Specificity between DVS and clinician assessment ($p = 0.22$).

Conclusions:

The DVS is a rapid, simple, and pain-free method of assessing burns depth. DVS is as accurate in assessing burn healing potential as specialist burns clinician's assessment. DVS has future capabilities in supporting early diagnosis of non-healing burns and subsequent management.

O12.6 Retrospective Analysis of Kerecis Omega3 Fish Skin Grafts in Burn and Wound Management: Clinical Outcomes and Utilization Patterns

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Oral presentations 12—Wounds & Psychosocial and Psychiatry, 5 September 2025, 08:30–10:00