

## **Regenerating matrix-based therapy for chronic wound healing: a prospective within-subject pilot study**

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### **ABSTRACT**

The aim of this study was to determine whether a skin-specific bioengineered regenerating agent (RGTA) heparan sulphate mimetic (CACIPLIQ20) improves chronic wound healing. The design of this article is a prospective within subject study. The setting was an urban hospital. Patients were 16 African-American individuals (mean age 42 years) with 22 wounds (mean duration 2.5 years) because of either pressure, diabetic, vascular or burnwounds. Two participants each were lost to follow-up or removed because of poor compliance, resulting in 18 wounds analysed. Sterile gauze was soaked with CACIPLIQ20 saline solution, placed on the wound for 5 min, then removed twice weekly for 4 weeks. Wounds were otherwise treated according to the standard of care. Twenty-two percent of wounds fully healed during the treatment period. Wounds showed a 15.2–18.1% decrease in wound size as measured by the vision engineering research group (VERG) digital wound measurement system and total PUSH scores, respectively, at 4 weeks ( $P = 0.014$  and  $P = 0.003$ ). At 8 weeks there was an 18–26% reduction in wound size ( $P = 0.04$ ) in the remaining patients. Wound-related pain measured by the visual analogue pain scale and the wound pain scale declined 60% ( $P = 0.024$ ) and 70% ( $P = 0.001$ ), respectively. Patient and clinician satisfaction remained positive throughout the treatment period. It is concluded that treatment with CACIPLIQ20 significantly improved wound-related pain and may facilitate wound healing. Patient and clinician satisfaction remained high throughout the trial.