

Enhanced silver dressing improves slough and debridement in venous leg ulcers: post hoc analysis of a randomized controlled trial

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Introduction

- Venous leg ulcers (VLUs) are hard-to-heal wounds that pose a significant burden to patients and healthcare systems worldwide
- A carboxymethylcellulose fibre dressing containing ionic silver (antimicrobial), ethylenediaminetetraacetic acid (metal chelating agent), and benzethonium chloride (surfactant; CISEB*) was designed to address the challenges of patients with hard-to-heal wounds
- A dialkylcarbamoyl chloride-coated (DACC[†]) dressing that attracts and immobilises microorganisms (bacteriostatic) via hydrophobic interactions
- A multicentre randomized controlled trial (RCT) conducted across 20 sites demonstrated that CISEB achieved a significantly higher rate of complete wound closure at 12 weeks compared to DACC (74.8% vs. 55.6%; $p < 0.0031$)¹
 - Fewer adverse events were observed with CISEB (5.0%) compared with DACC (17.6%)¹

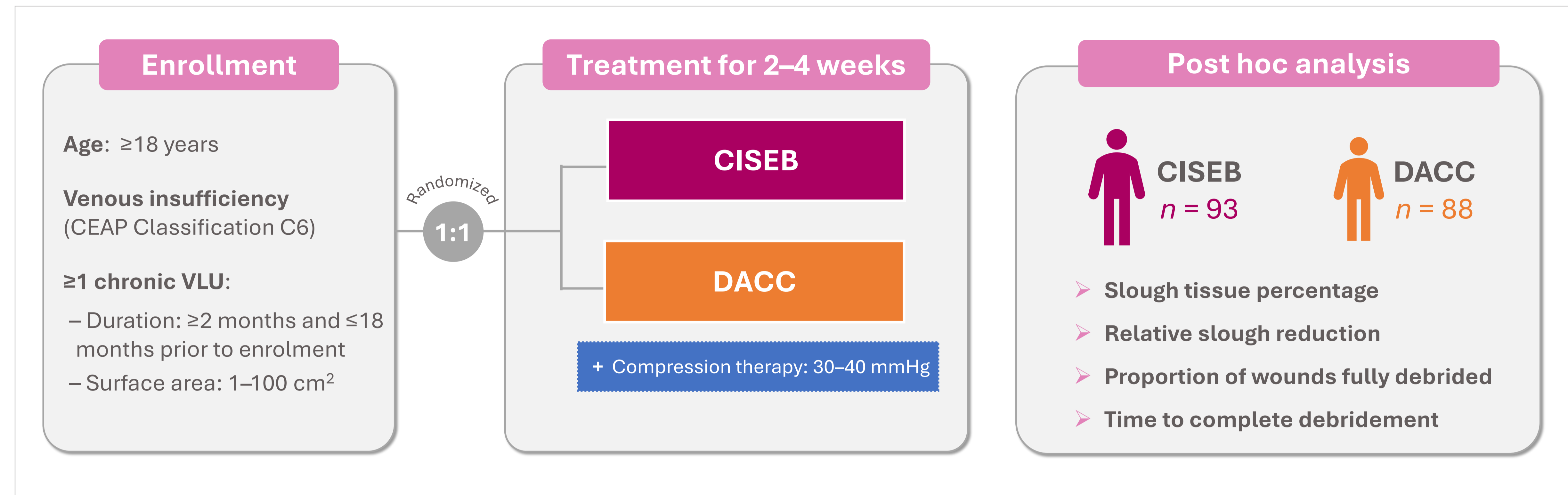
Objective

To evaluate slough and complete debridement outcomes from an RCT of CISEB vs DACC in VLUs

Methods

- Eligible patients were randomized 1:1 to receive either CISEB or DACC in accordance with their instructions for use (Figure 1)
- Patients were treated with therapeutic compression at 30–40 mmHg and the study dressing for a minimum of 2 and up to 4 weeks (Figure 1)
 - At week 2, continuation of the study dressing or transition to long-term management with the standard of care was at the discretion of the investigator
 - VLUs that did not heal within 4 weeks were managed with the standard of care for up to 12 weeks, or until the wound had healed or the dressing was no longer clinically indicated

Figure 1. Study Design



Results

Figure 2. Relative Reduction in Slough Tissue

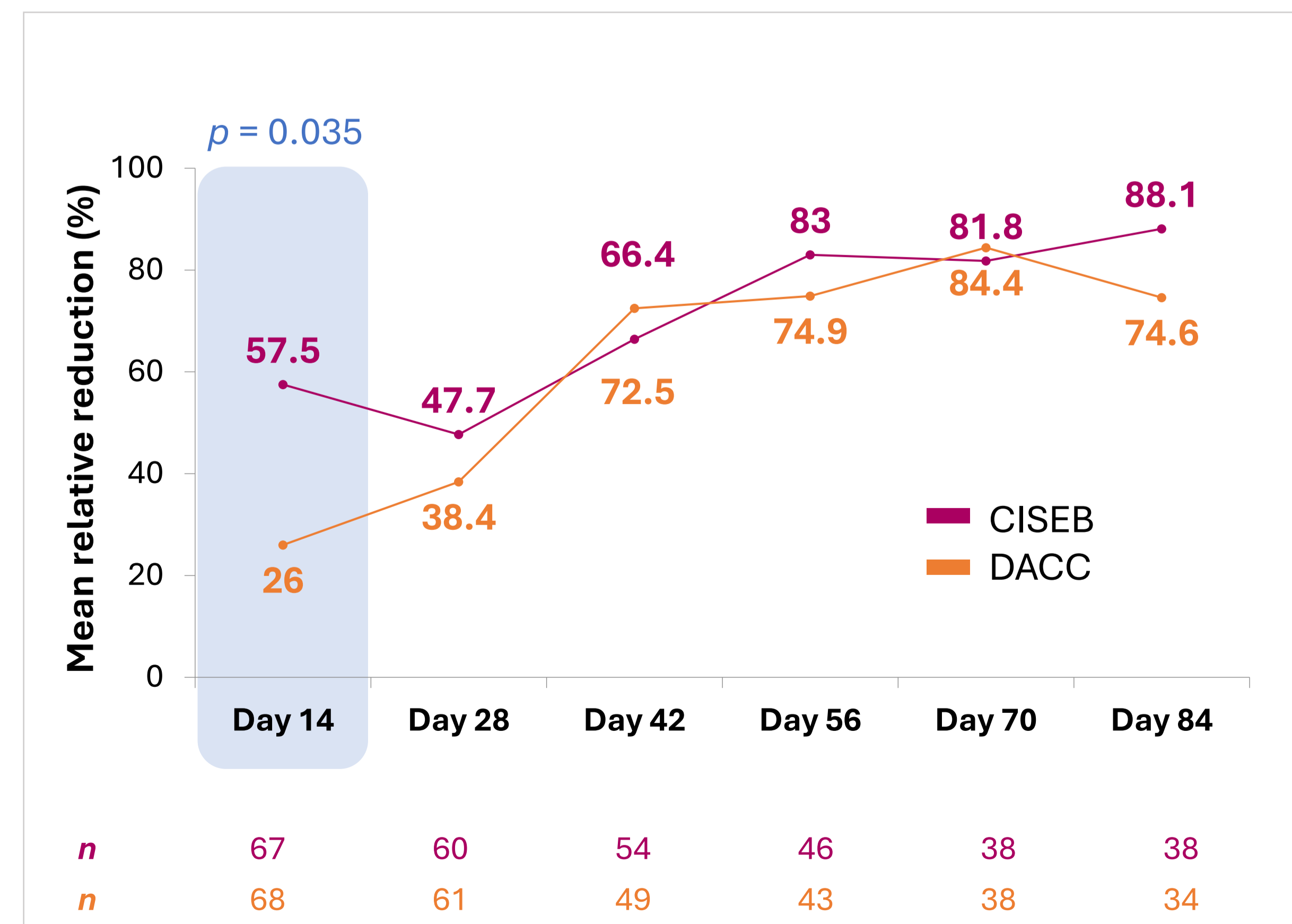


Figure 3. Complete Debridement

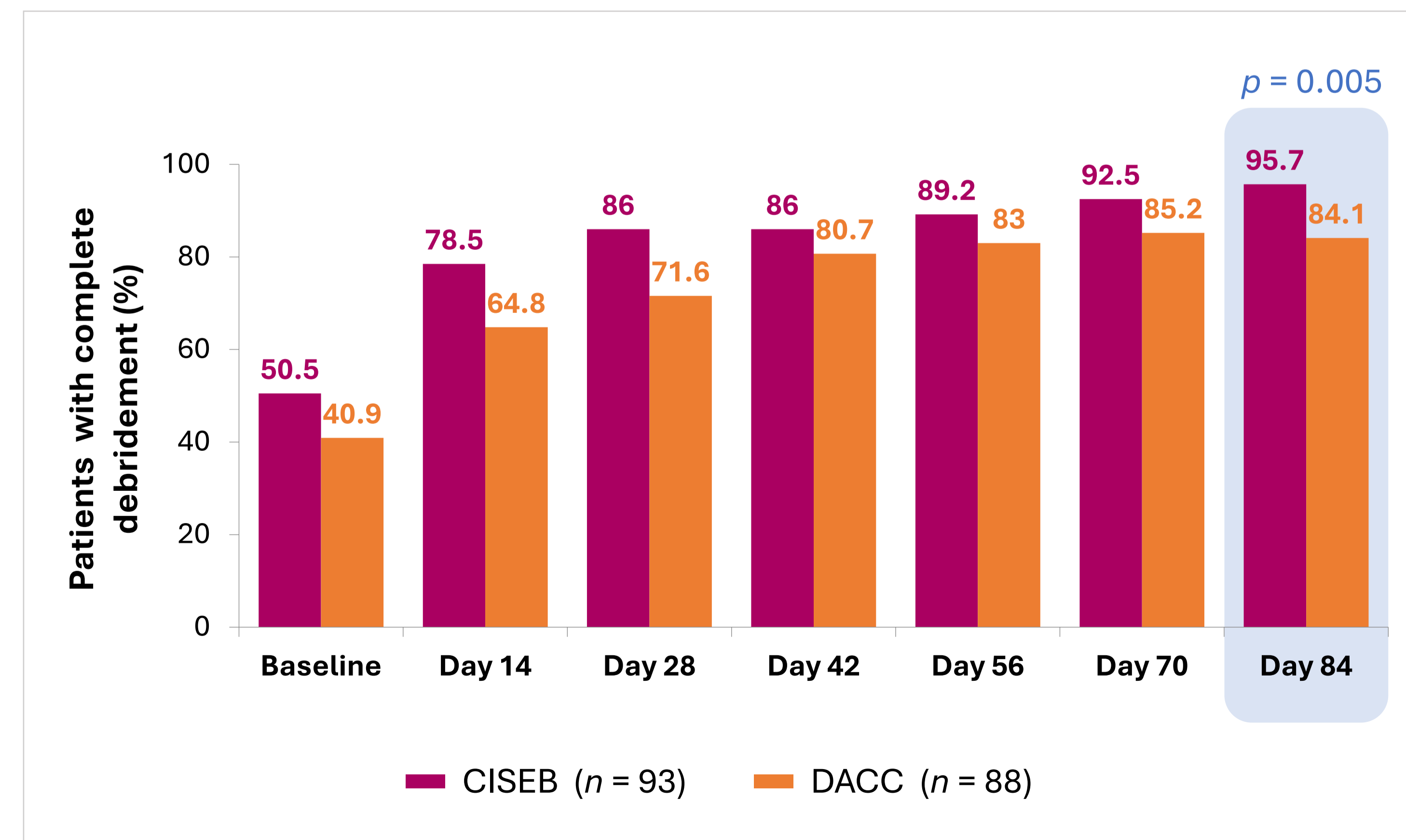
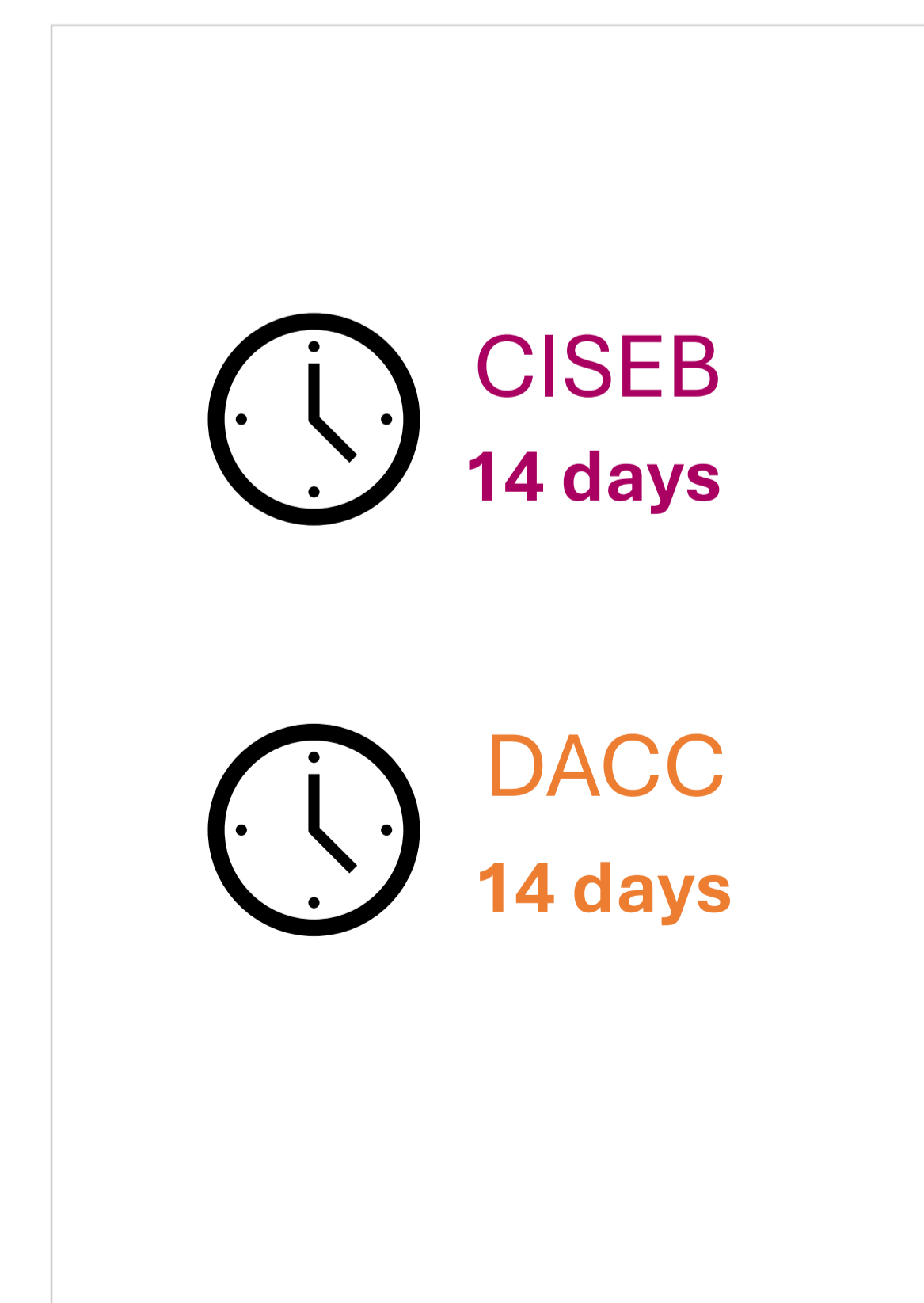


Figure 3 Median Time to Complete Debridement



Discussion

- A statistically significant difference in relative slough reduction from baseline was observed at Day 14 between CISEB (57.5%) and DACC (26%)
- There was a progressive improvement in the proportion of patients who achieved complete debridement, which persisted to Day 84 ($p = 0.005$)

Conclusions

- CISEB demonstrated superior slough reduction and complete debridement compared with DACC
- Debridement may help reduce infection risk and accelerate healing
- These post hoc findings reinforce the RCT results and support the role of CISEB in managing hard-to-heal VLUs

References:

1. Beraldo S et al. *J Wound Care* 2025;34(3):170-178.
- *AQUACEL® Ag Advantage
†Cutimed Sorbact