

THE new **GOLD STANDARD**

The **FIRST** multicenter, randomized and placebo-controlled study



Accelerated Healing | High Tolerability | Early Pain Reduction

Innovative, effective & safe therapy

Study Title:

Treatment of Chronic Wounds with the plasma care® cold plasma device versus placebo: A multicenter, randomized, single-blind clinical trial

Published in: Journal of Wound Care, Volume 34, Issue 8, August 2025

Authors: Strohal et al.

Study Design:

Prospective, multicenter, two-arm, randomized controlled trial (RCT). Single-blind.

Participants

70 patients (18–95 years) with chronic wounds ($\leq 20 \times 10$ cm; diverse etiologies/stages).

- Plasma group (n=35): plasma care® + standard wound care
- Placebo group (n=35): placebo device + standard wound care

duration of treatment: 6 weeks

Methodology:

Standardized Care Protocol:

- Wound cleansing with 0.9% NaCl
- Phase-appropriate primary dressings (no antimicrobials in CAP group)

Frequency:

Application: 60-second treatment per wound area

- Week 1: 3x/week (Mon/Wed/Fri)
- Weeks 2: 2x/week (Mon/Thu)
- Week 3 onward: 1x/week (Mon)

Dressing Changes: Every 2-3 days

Endpoint:

Primary: Absolute/relative wound area reduction

Secondary: pH, pain (VAS), exudate, signs of infection, tolerability

A clinical MILESTONE in modern WOUNDCARE

600%
higher
HEALING RATE

83%
reduced
WOUND EXUDATE

0
adverse
EVENTS

THE new **GOLD STANDARD**

The **FIRST** multicenter, randomized and placebo-controlled study



Accelerated Healing | High Tolerability | Early Pain Reduction

Key Findings:

1. Wound Healing Dynamics:

- 54.3% complete wound healing with CAP vs. 5.7% with placebo at Day 28
- 600% higher healing rate with CAP in only 28 days
- Wound area reduction: 0.7cm²/visit (CAP) vs. 0.35cm²/visit (placebo)

2. Wound Environment:

- pH normalization: 7.73 (CAP) vs. 9.11 (placebo)
- Exudate reduction: 83% of CAP patients achieved „low/no“ exudate vs. 17% (placebo)

3. Patient Outcomes:

- Significant pain reduction (VAS) from 3rd CAP treatment
- 100% tolerability - no device-related adverse events

Conclusion:

plasma care® enables significantly **faster wound closure, accelerating recovery** versus standard care. **Higher reduction in exudate** minimizes dressing frequency and nursing workload, **saving time and costs**. Effective **pain relief** from early treatments improves **patient compliance** and comfort. Optimized wound environment lowers infection risks while demonstrating **excellent safety**. This evidence-based treatment option delivers superior clinical outcomes efficiently, elevating therapeutic standards across care settings.

The evidence supports **plasma care®** as an effective plus to standard wound care.

