

# ACCEPTABILITY AND USABILITY OF A TRI-ASSOCIATE FACTOR ANTIMICROBIAL WOUND CLEANSER AND GEL ACROSS ALL CARE SETTINGS

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## Abstract

### Aim:

**Objective:** Evaluate clinical acceptability, usability, safety, and performance of a 0.057% sodium hypochlorite antimicrobial cleanser/gel vs. current standard antimicrobial alternatives.

- **Scope:** Chronic and acute wounds of various etiologies across acute, outpatient, long-term, and home-care settings.

### Method:

- **Design:** Prospective observational study (Feb–Nov 2025).
- **Population:** N = 50 patients.
- **Wound Types:** Venous leg ulcers, pressure injuries, diabetic foot ulcers, and other etiologies.
- **Intervention:**
  - Cleanser: Wound irrigation/soaking at every dressing change (3 cases also used for NPWT instillation).
  - Gel: Applied as primary dressing for pressure injuries, venous leg ulcers, and diabetic foot ulcers.
- **Assessment Tools:** Wound characteristics, MolecuLight imaging (bacterial fluorescence), odour/pain scales, debridement progress, and 5-point Likert satisfaction surveys.

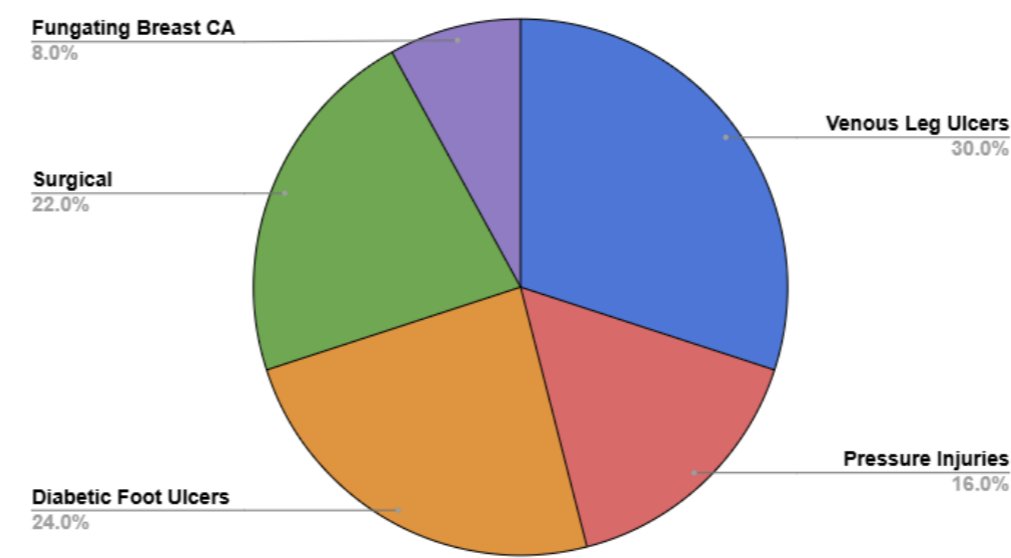
### Results / Discussion:

- **Baseline Status:** Majority of wounds presented with critical colonization/infection, moderate-to-strong malodour, and significant slough/necrotic tissue.
- **Clinician Satisfaction:** Consistently "excellent" mean scores for ease of use, lack of pain/stinging, bioburden reduction, and odour control.
- **Clinical Observations:**
  - Rapid reduction of devitalised tissue within the first week.
  - Marked decrease or elimination of malodour within the first week.
- **Adjunctive Therapy Outcomes:**
  - Gel Group: Complete healing achieved in all treated pressure injuries.
  - NPWT Instillation: Clear improvement in bacterial fluorescence confirmed by MolecuLight imaging.
- **Safety/Tolerability:** Formulation proved safe and well-tolerated across all care settings.

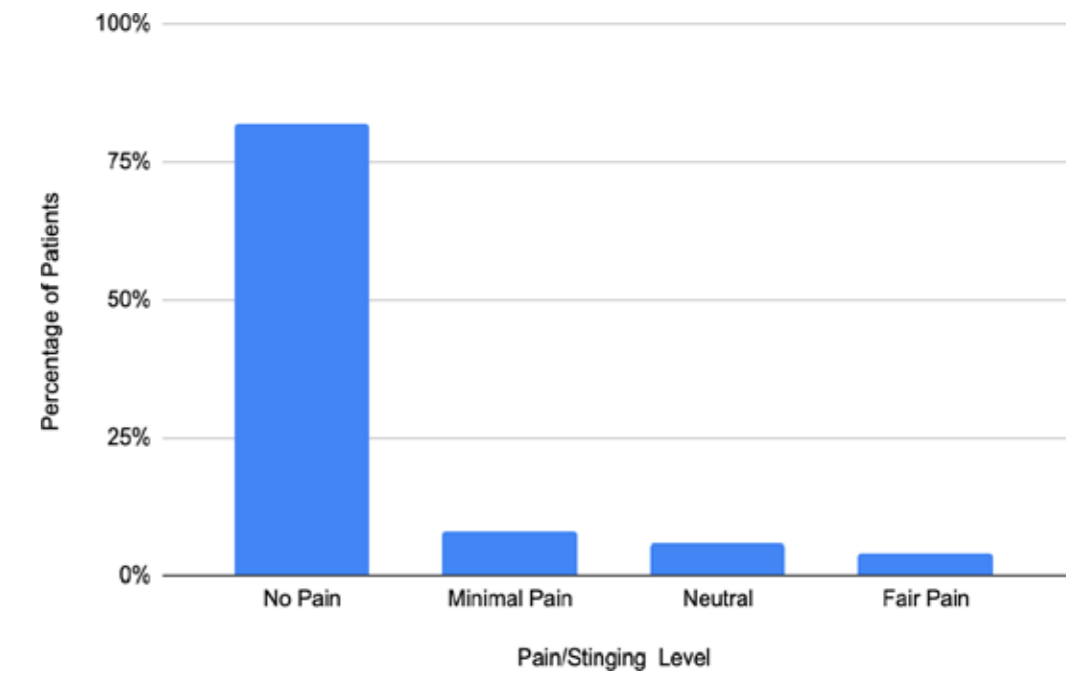
### Conclusion:

- **Performance:** Demonstrated excellent acceptability and clinical performance across diverse wound types.
- **Key Benefits:** Rapid bioburden/odour control, minimal pain, effective debridement support, and compatibility with NPWT instillation.

## Figures

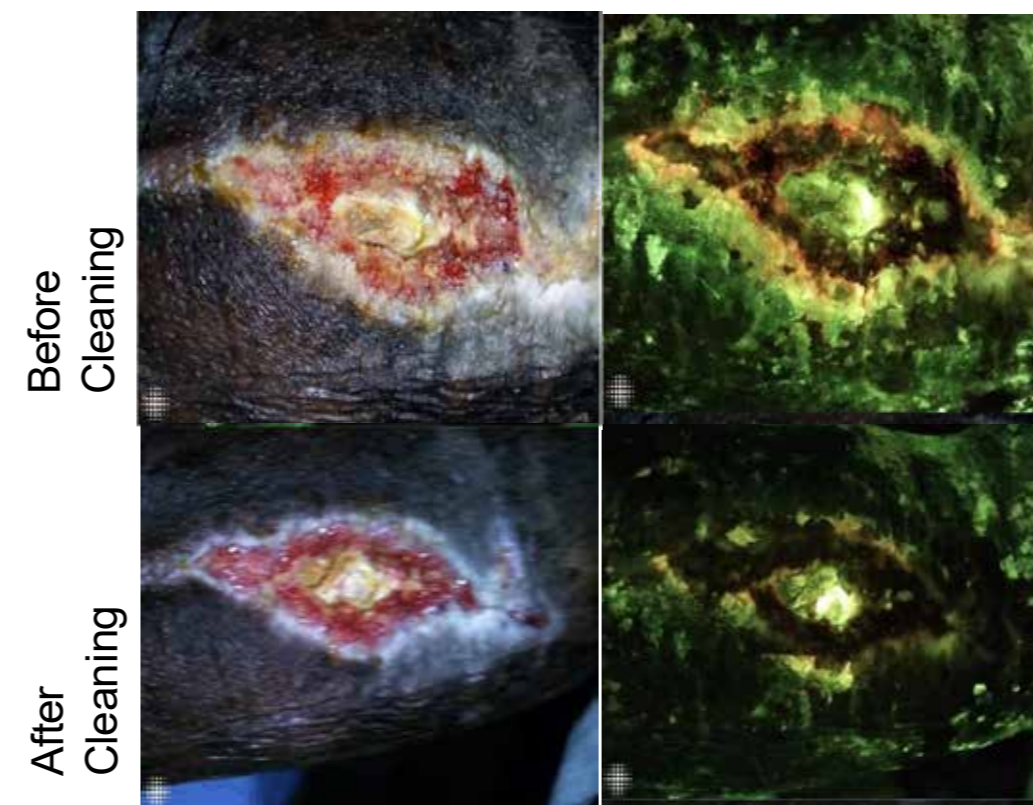


**Figure 1. Wound Types Represented in Study Cohort**  
Distribution of wound etiologies treated in the study (N=50). The cohort represented a diverse range of acute and chronic wounds including diabetic foot ulcers, venous leg ulcers, pressure injuries, surgical wounds, and malignant fungating breast cancer wounds.



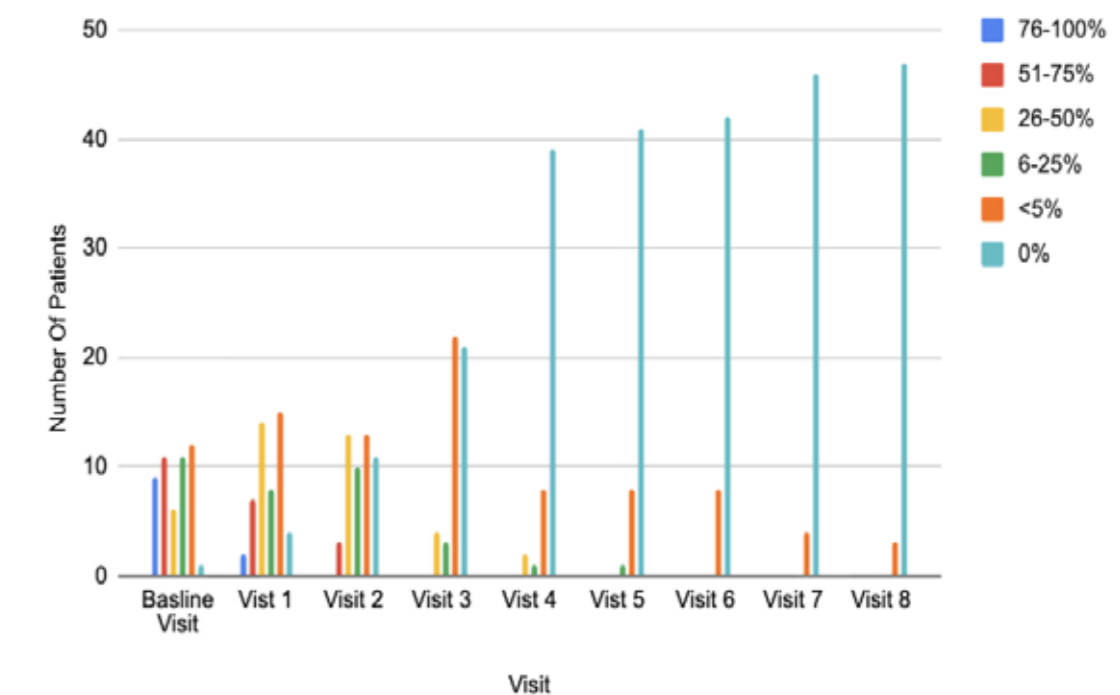
**Figure 2. Patient Response To Product Use**

Patient-reported tolerability of the 0.057% sodium hypochlorite cleanser (N=50). Responses demonstrated high tolerability, with most patients experiencing no pain or stinging during application. A minority of patients reported mild or fair sensations.



**Figure 3. MolecuLight Imaging: Baseline vs. Post-Cleansing Bacterial Burden**

Representative MolecuLight imaging from a study patient. Baseline image (left) displays elevated bacterial fluorescence indicative of critical colonization. Follow-up image (right) demonstrates substantial reduction in bacterial burden after treatment with the antimicrobial cleanser regimen.



**Figure 4. Necrotic Tissue Reduction Over Time**

Distribution of patients by necrotic tissue interval across visits (N=50). At baseline, the majority of patients presented with >50% necrosis. By the final visit, patients in the 51–100% intervals decreased to zero, and the number of patients with minimal or resolved necrosis (<5%) increased progressively at each visit interval.

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