

Acceptability and Usability of an Optimized 0.057% Sodium Hypochlorite (NaOCl) Broad Spectrum Antimicrobial Wound Cleanser Across All Care Settings

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PURPOSE AND METHODS

PURPOSE:

- **Objective:** Evaluate clinical acceptability, usability, safety, and performance of an optimized 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.

METHODS:

- **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), odor/pain scales, debridement progress, and 5-point Likert satisfaction surveys.

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DATA FINDINGS

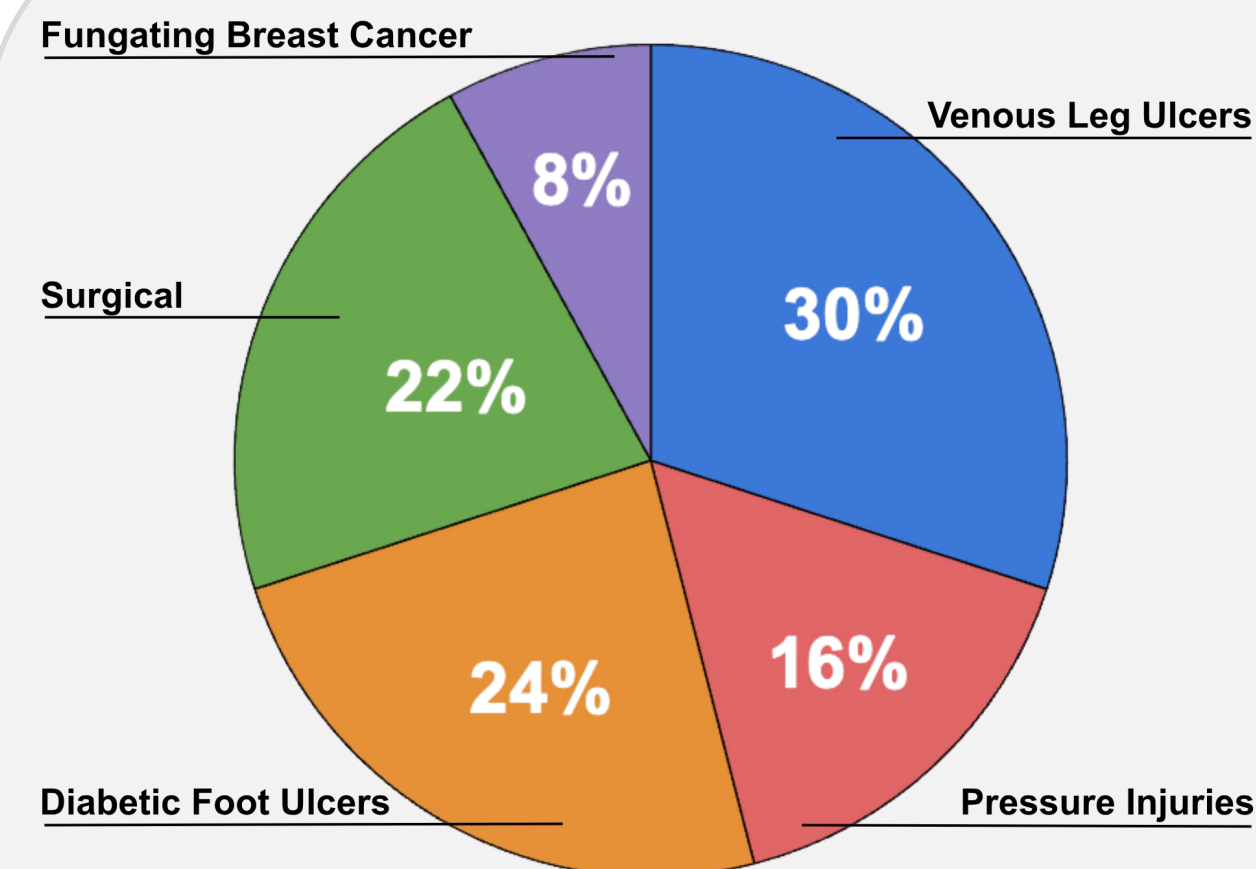


Figure 1. Wound Types Represented in Study Cohort
Distribution of wound etiologies treated in the study (N=50). The cohort represented a diverse range of acute and chronic wounds including diabetic foot ulcers, venous leg ulcers, pressure injuries, surgical wounds, and malignant fungating breast cancer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

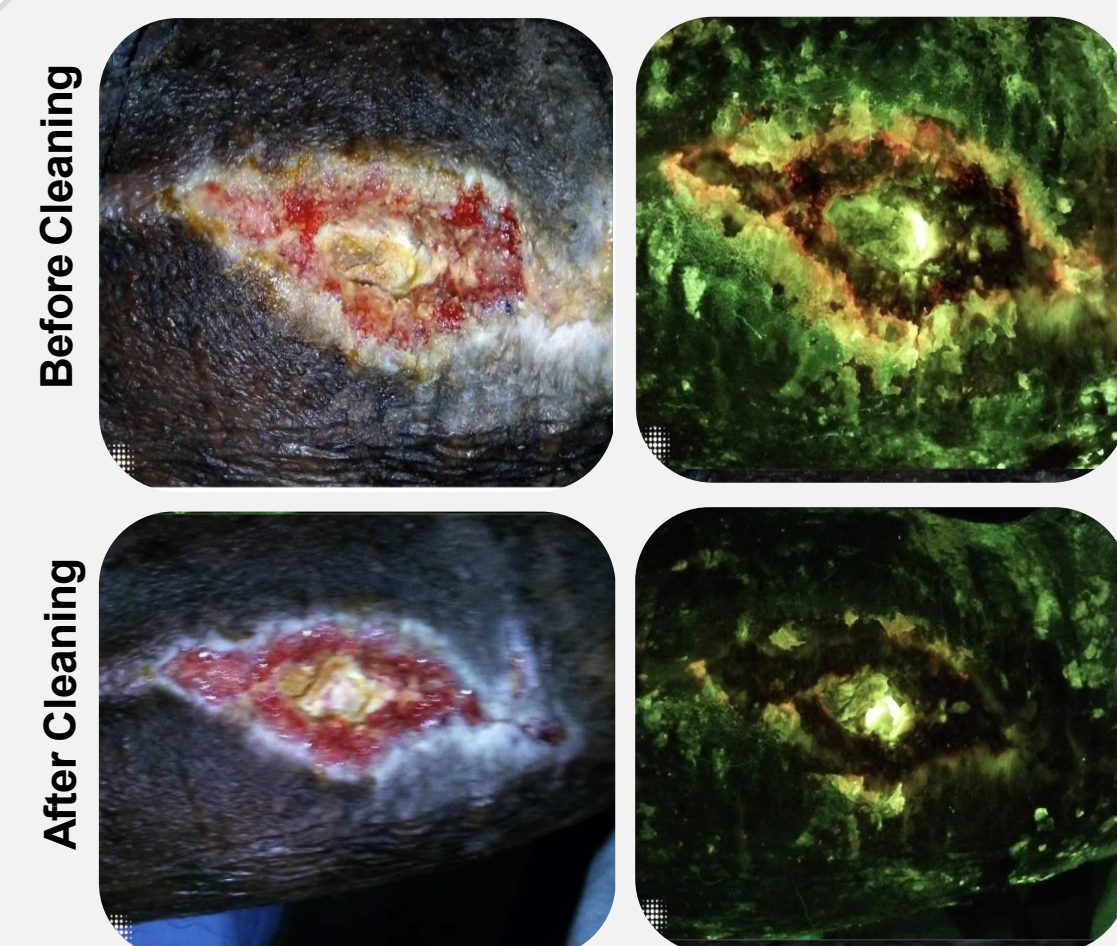


Figure 3. MolecuLight™ Imaging: Baseline vs. Post-Cleansing Bacterial Burden
Representative MolecuLight™ imaging from a study patient. Baseline image (left) displays elevated bacterial fluorescence indicative of critical colonization. Follow-up image (right) demonstrates substantial reduction in bacterial burden after treatment with the antimicrobial cleanser regimen.

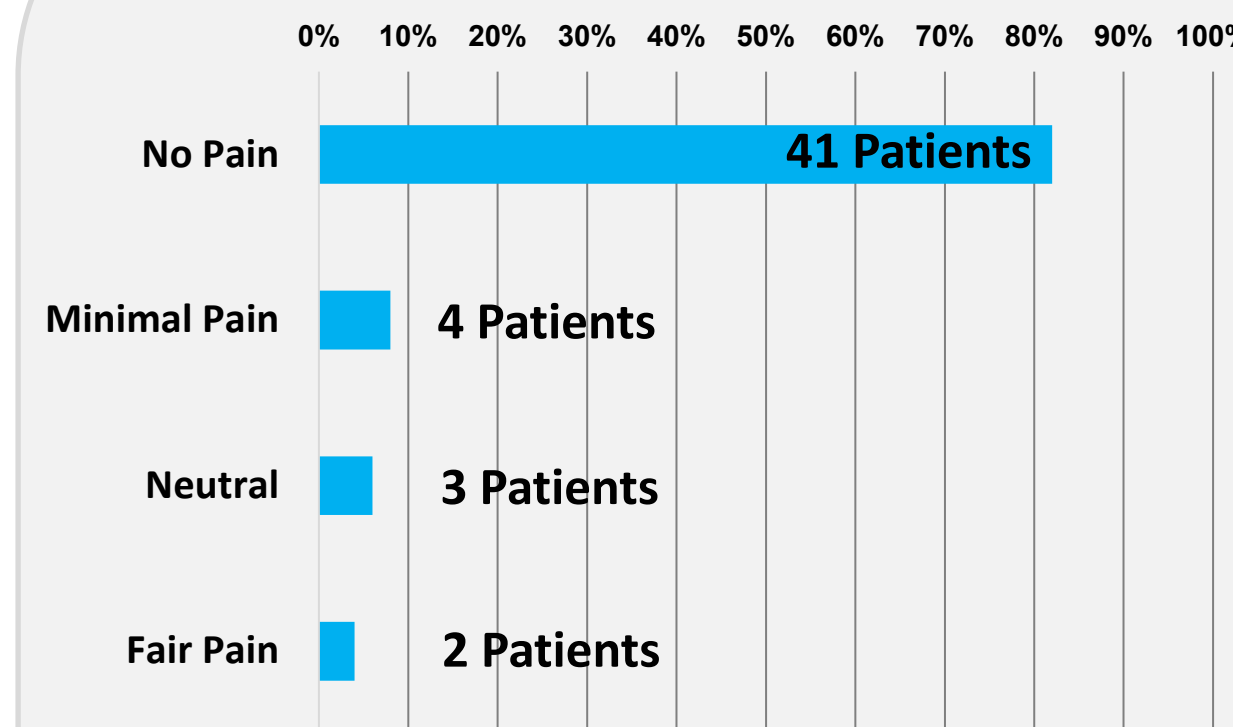


Figure 2. Patient Response To Product Use
Patient-reported tolerability of the optimized 0.057% sodium hypochlorite cleanser (N=50). Responses demonstrated high tolerability, with most patients experiencing no pain or stinging during application. A minority of patients reported mild or fair sensations.

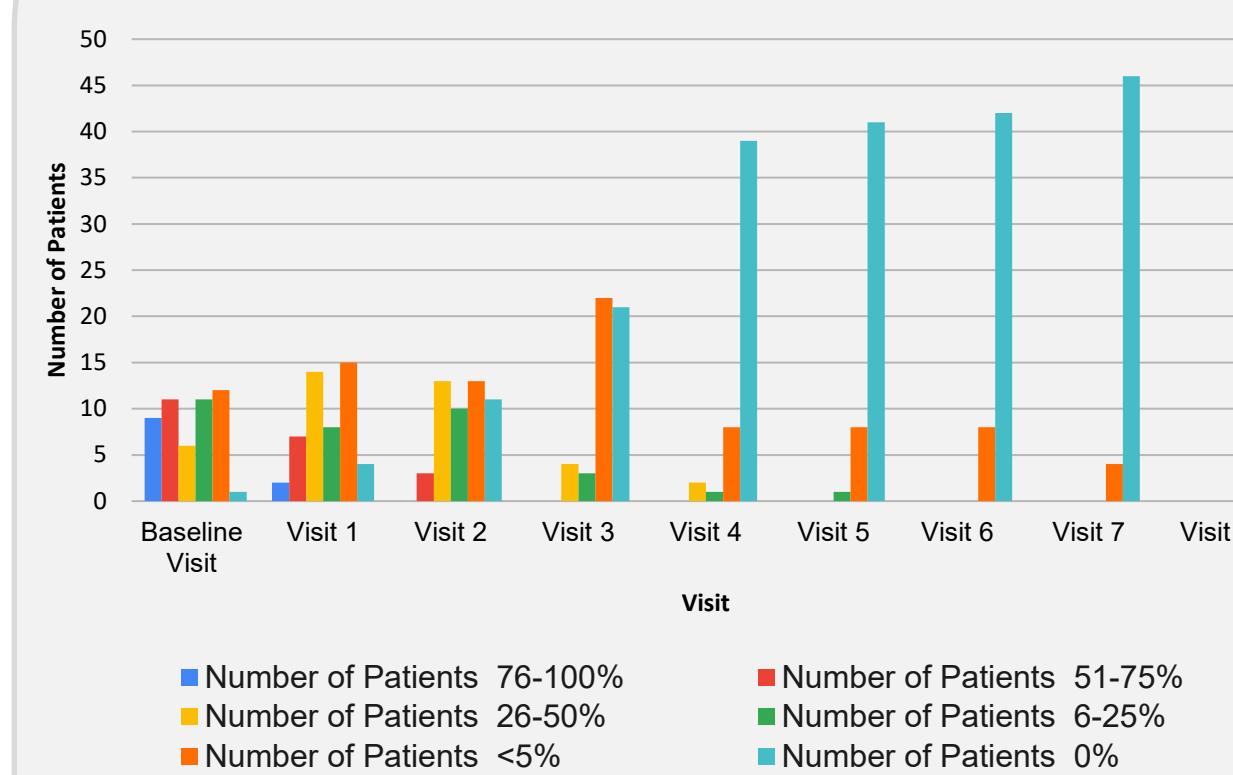


Figure 4. Necrotic Tissue Reduction Over Time
Distribution of patients by necrotic tissue interval across visits (N=50). At baseline, the majority of patients presented with >50% necrosis. By the final visit, patients in the 51–100% intervals decreased to zero, and the number of patients with minimal or resolved necrosis (<5%) increased progressively at each visit interval.

RESULTS AND CONCLUSION

Optimized 0.057% Sodium Hypochlorite

RESULTS:

Baseline Status: Majority of wounds presented with critical colonization/infection, moderate-to-strong malodor, and significant slough/necrotic tissue.

Clinician Satisfaction: Consistently "excellent" mean scores for ease of use, lack of pain/stinging, bioburden reduction, and odor control.

Clinical Observations :

- Rapid reduction of devitalized tissue within the first week.
- Marked decrease or elimination of malodor 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/odor control, minimal pain, effective debridement support, and continuous flow compatibility with NPWT instillation.

REFERENCES

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