Case Report ISSN 2835-6276

American Journal of Medical and Clinical Research & Reviews

A Patient-Managed Dual-Product Dressing Strategy Post Mohs Surgery: Collagen–Mānuka Honey–Hydroxyapatite with Silicone Bordered SAP Dressing

Rachel Beem[1], Isaac Rodriguez[1], Chrystalbelle Rogers[2], Gwen Beard[3]

1. SweetBio, Inc., Memphis, TN, USA
2. HARTMANN USA, Rock Hill, SC, USA
3. Memphis Dermatology, Memphis, TN, USA

*Correspondence: Rachel Beem

Received: 05 Feb 2026; Accepted: 10 Feb 2026; Published: 15 Feb 2026

Citation: Rachel Beem. A Patient-Managed Dual-Product Dressing Strategy Post Mohs Surgery: Collagen–Mānuka Honey–Hydroxyapatite with Silicone Bordered SAP Dressing. AJMCRR. 2026; 5(2): 1-5.

Abstract

Postoperative wounds following Mohs micrographic surgery (MMS) can present healing challenges when managed by secondary intention healing (SIH). Conventional SIH care typically involves petrolatum-based dressings and gauze and may be associated with prolonged healing and variable outcomes. This case series evaluates an advanced, patient-managed SIH approach using a bioengineered collagen–Mānuka honey–hydroxyapatite primary dressing (CHD) combined with a silicone bordered SAP (superabsorbent polymer) cover dressing. Nine post-MMS wounds were treated using the dual-dressing regimen delivered via a durable medical equipment (DME) model and applied by patients at home. Healing progression was assessed through serial clinical observation and photography. All wounds demonstrated consistent improvement, including robust granulation tissue formation, re-volumization of tissue defects within an average of six weeks, and reduction in periwound erythema. Patients successfully managed dressing changes independently. This reimbursable, home-delivered dual-dressing strategy may support effective secondary intention healing following MMS while improving access to advanced wound care and patient participation in the healing process.

Introduction

Mohs micrographic surgery (MMS) is the gold standard for excising non-melanoma skin cancers; however, postoperative defects often present healing challenges due to limited vascularity, skin fragility, or underlying comorbidities. Secondary intention healing (SIH), a method of allowing wounds to heal without surgical closure, remains common but can result in delayed healing, patient discomfort, and variable cosmetic results [1]. SIH combined with petrolatum jelly followed by a nonstick dressing, gauze, and surgical tape is the current standard of care for wound healing post-Mohs. There has been a recent shift to treat wounds with primary dressings creating a new category of advanced SIH. Clinical research tradi-

tionally has a limited focus on either the primary (product placed directly on the wound bed) or secondary (cover/protect primary dressing) dressing's method of action to progress wounds towards closure. While each have a critical independent role, their compatibility to work synergistically to progress wound healing should be considered and assessed.

VERIS™, a collagen, medical-grade Mānuka honey, and hydroxyapatite primary dressing (CHD), is designed to support the wound microenvironment. Clinically, it has been shown to support key phases of wound repair, including granulation tissue formation, re-volumization of tissue defects, reduction of local inflammation, and progressive wound closure [2-8]. In vitro studies further support its ability to reduce bacterial load, suppress harmful matrix metalloproteinases (MMPs), and increase angiogenic growth factor production [9-11].

Silicone bordered SAP (superabsorbent polymer) dressings, such as Zetuvit® Plus, serve as an advanced secondary dressing that complements the primary wound healing process. In addition to providing atraumatic adhesion and a protective barrier, these dressings permanently absorb and retain wound exudate which can impair healing if left unchecked. By converting wound exudate into a gel matrix, the absorptive core of the SAP binds and retains bacteria and excess MMPs, helping regulate moisture and the inflammatory microenvironment [12,13].

When used together (Figure 1), the CHD + SAP dressing dual-layer strategy creates a synergistic healing environment that supports both the deeper regenerative processes and surface-level protection. This combined approach may accelerate wound closure trajectory, reduce complication risk, and offer patients a practical and effective at-home dressing option.

Figure 1. Digital rendering of the application of the CHD + SAP dressings.

This case series reports clinical outcomes from nine post-MMS wounds managed with the CHD + SAP dressing combination applied at home by patients. The dual-dressing model offers a reimbursable, accessible alternative to in-clinic dressing changes, particularly beneficial for elderly or mobility-limited individuals.

Materials and Methods

Nine patients who underwent MMS for skin cancer were managed postoperatively using SIH. Through a durable medical equipment (DME) model (MiroDx, Dallas, TX), each patient received home delivery of the primary collagen–Mānuka honey–hydroxyapatite dressing (CHD; VERIS™, SweetBio) and a silicone bordered SAP dressing (Zetuvit® Plus Silicone Border, HARTMANN). Patients were instructed to follow manufacturer guidelines for application, which includes hydrating the CHD, placing it directly on the wound bed, and securing. Dressings were changed daily or as needed per doctor's recommendation.

The average wound area was 8.4 cm^2, with an average depth of 0.6 cm. Wound sites included the lower leg, hand, back, and scalp. Healing progression was evaluated through serial photography, assessing qualitative indicators (granulation, erythema, epithelialization), and quantitative depth reduction.

Results

All nine wounds showed consistent, measurable improvement. Full re-volumization occurred within 6 weeks (average), with visible granulation tissue formation, epithelialization, and reduced periwound erythema. Notably, even wounds with exposed underlying structures (e.g., fascia or periosteum) demonstrated healing without need for additional intervention.

Photographic comparisons showed progressive wound depth reduction and closure over time (Figure 2). Patients were able to self-manage dressing changes at home, indicating high usability and compliance.

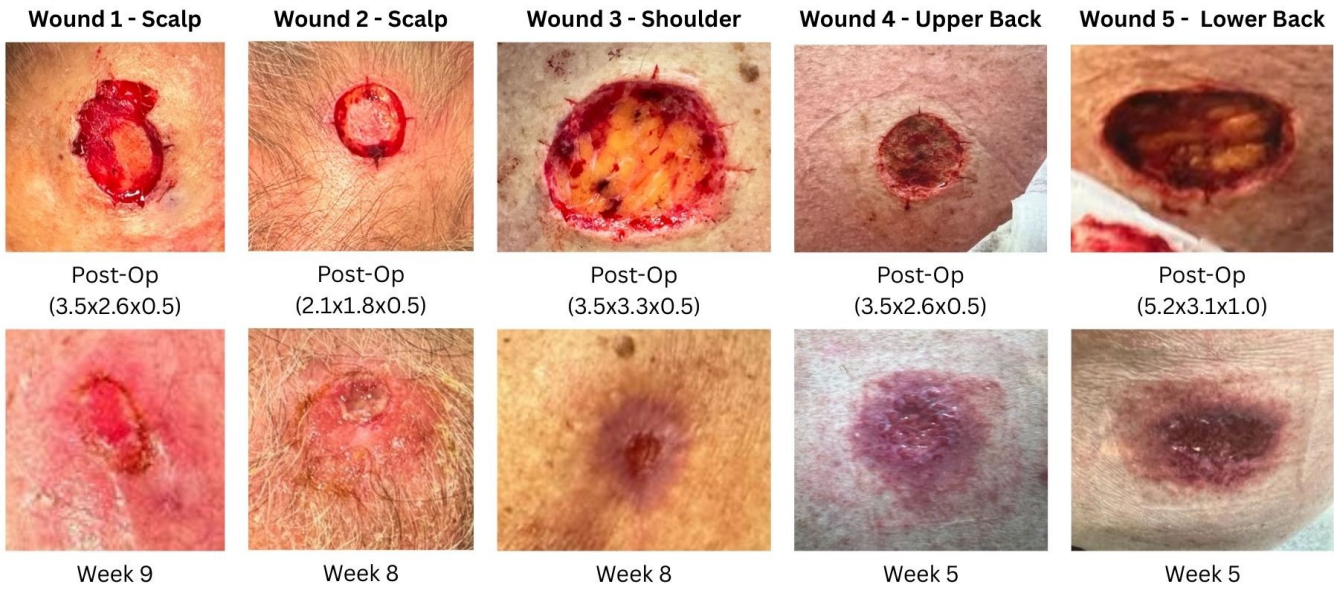

Figure 2. Images depicting wound healing progression of five sites post-MMS.

Discussion

This series supports the use of a dual-dressing, patient-applied strategy as a clinically effective, accessible approach for post-MMS wound healing by advanced SIH. The CHD protects the wound and manages the microenvironment, while the SAP cover sequesters and retains negative biomarkers, balances the moist microenvironment, and protects the primary dressing.

Additionally, this model is insurance-reimbursed as conservative care wound supplies and delivered to a patient's home via DME, increasing accessibility for elderly or rural patients who may otherwise face barriers to advanced wound care. It also empowers patients and caregivers to participate in their healing process.

Limitations include small sample size, lack of quantitative wound measurement follow ups, and absence of comparator groups. Future prospective studies are recommended.

Conclusion

The combination of a collagen–Mānuka honey–hydroxyapatite dressing with a silicone bordered SAP cover dressing demonstrates strong potential as a patient-friendly, dual-product solution for post-Mohs surgical wound healing. Clinically effective, affordable, and accessible, this strategy supports the mission to deliver health equity through advanced wound care and removes barriers to healing.

References

1. Schwartzman G, Cartron AM, Khachemoune A. Review and reappraisal of assessment parameters of second intention healing after Mohs micrographic surgery. Arch Dermatol Res. 2022 Jan;314 (1):17-23.
2. Rodríguez I, Alvarez A, Massey C, et al. Novel bioengineered collagen with Manuka honey and hydroxyapatite sheet for treatment of lower extremity chronic wounds in an urban hospital wound care setting. Wounds. 2023;35(1):E35-E38.
3. Rodriguez IA, Strombergsson A, Weinstein R, et al. Preliminary clinical evaluation using a novel bioengineered wound product to treat lower extremity ulcers. Int J Low Extrem Wounds. 2023;22 (1):139-145.
4. McMurray SL, Wallace MM, Stebbins WG, Clayton AS. Use of a novel biomaterial to enhance secondary intention healing. Dermatol Surg. 2021;47(6):843-844.
5. Arnaud K, Wallace MM, Wheless LE, Stebbins WG, Clayton AS. Novel biomaterial containing gelatin, Manuka honey, and hydroxyapatite enhanced secondary intention healing versus standard secondary intention healing in Mohs surgical defects: randomized controlled trial. Dermatol Surg. 2023;49(12):1160-1164.
6. Beem R, Rodriguez I, Dhir N, Dhir A, Faust E. At-home use of collagen–mānuka honey–hydroxyapatite dressing for traumatic wound care: A preliminary three-patient case series. Int J Clin Case Rep Rev. 2025;30(5).

7. Adewumi, T., Ohaji, C., Rodriguez, I., & Wallace, M. (2025). Surgical wound re-volumization through patient-applied collagen–mānuka honey dressing in post-Mohs wound care. Dermatologic Surgery. Advance online publication.
8. Rodriguez I., Beem, R., Dhir, N., Dhir, A. Wound Healing of Auricular Defects After Mohs Surgery Using an At-Home, Patient-Applied Collagen-Mānuka Honey-Hydroxyapatite Dressing. JOJ Dermatol & Cosmet. 2025; 7(1): 555701.
9. Williams M, Rodriguez I, Strombergsson A, Fabbri S, Westgate S. A novel bioengineered wound product with in vitro capabilities to reduce bacteria. Biomed Transl Sci. 2021;1(1):1-3.
10. Rodriguez I, Conti T, Bionda N. Microenvironment influence of a novel bioengineered wound product, APIS®: a preliminary in vitro analysis of inflammatory marker and growth factor secretion. Int J Biomater. 2021;2021:6612870.
11. Rodriguez I, Conti T, Bionda N. A preliminary direct comparison of the inflammatory reduction and growth factor production capabilities of three commercially available wound products. Int J Mol Sci. 2022;23(18):10670.
12. Ball, C, Taylor, C, Salgado, B, Révész, E, & Heller, C. (2025). In vitro evaluation of the capability of a silicone superabsorbent polymer (SAP) dressing to modulate pro-inflammatory cytokines. Wounds International, 16(2), 12–23.
13. Barrett, S, Rippon, MG, and Rogers, AA. (2020). Treatment of 52 patients with a self-adhesive siliconised superabsorbent dressing: a multicentre observational study. Journal of Wound Care, 29(6), 340–349.