

BACKGROUND

Understanding and confronting the treatment challenges of chronic wounds lead to an improved quality of life for oncology patients. Effective wound management is vital for oncology patients, especially those with concurrent conditions like diabetes and immobility. Assessing the effectiveness of skincare interventions, such as the eUSKIN® products composed of bioactive ingredients including Atelocollagen peptides¹, Hyaluronic acid, Gynura procumbens² and Aloe vera³ involved in inflammation, reduction and wound healing, which is crucial for enhancing patient outcomes.

Treatment-related skin toxicities

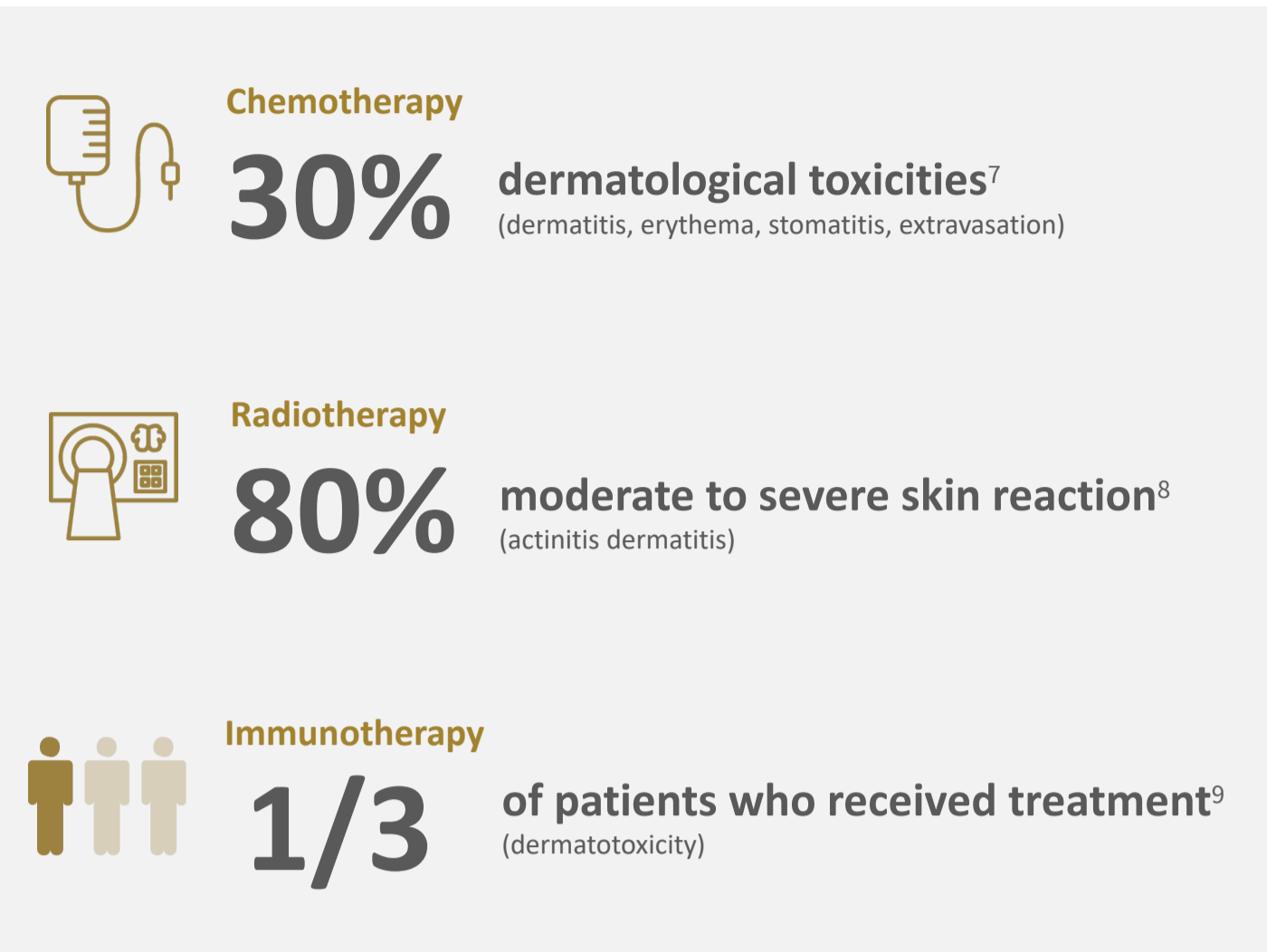
Oncology treatments like chemotherapy and targeted therapy can cause various skin issues, such as inflammation, dermatitis, and nail problems⁴.

Malignant wounds

Advanced cancer can penetrate the skin, causing chronic wounds that have poor healing capabilities. These wounds worsen, becoming fungating and disrupting skin integrity. Closing them poses significant challenges and distress for patients and caregivers⁵.

Palliative care wounds

Patients receiving palliative care for advanced cancers often experience symptoms like chronic wounds and pressure ulcers. These issues are commonly overlooked, leading to inadequate symptom management and patient protection⁶.



Common skin conditions during oncology treatment



OBJECTIVES

This multi-case study aims to evaluate the efficacy and tolerability of eUSKIN® products in wound management among oncology patients with various clinical profiles, focusing on observable improvements in wound appearance and patient adherence. Participants include oncology patients with suffering from radiation dermatitis, malignant wounds and pressure ulcers undergoing chemotherapy and/or radiotherapy cycles^{10,11}. The study assesses efficacy based on observable improvements in wound appearance, patient adherence to the treatment regimen, and the overall tolerability of eUSKIN® products. The findings will highlight improvements in wound appearance progression and product tolerability.

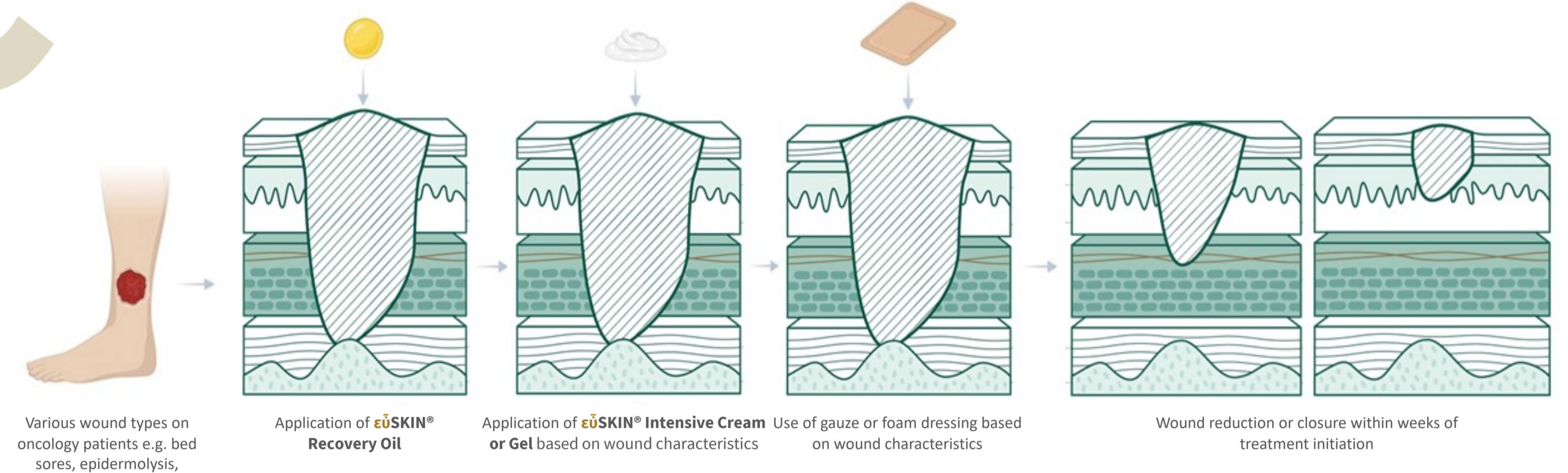
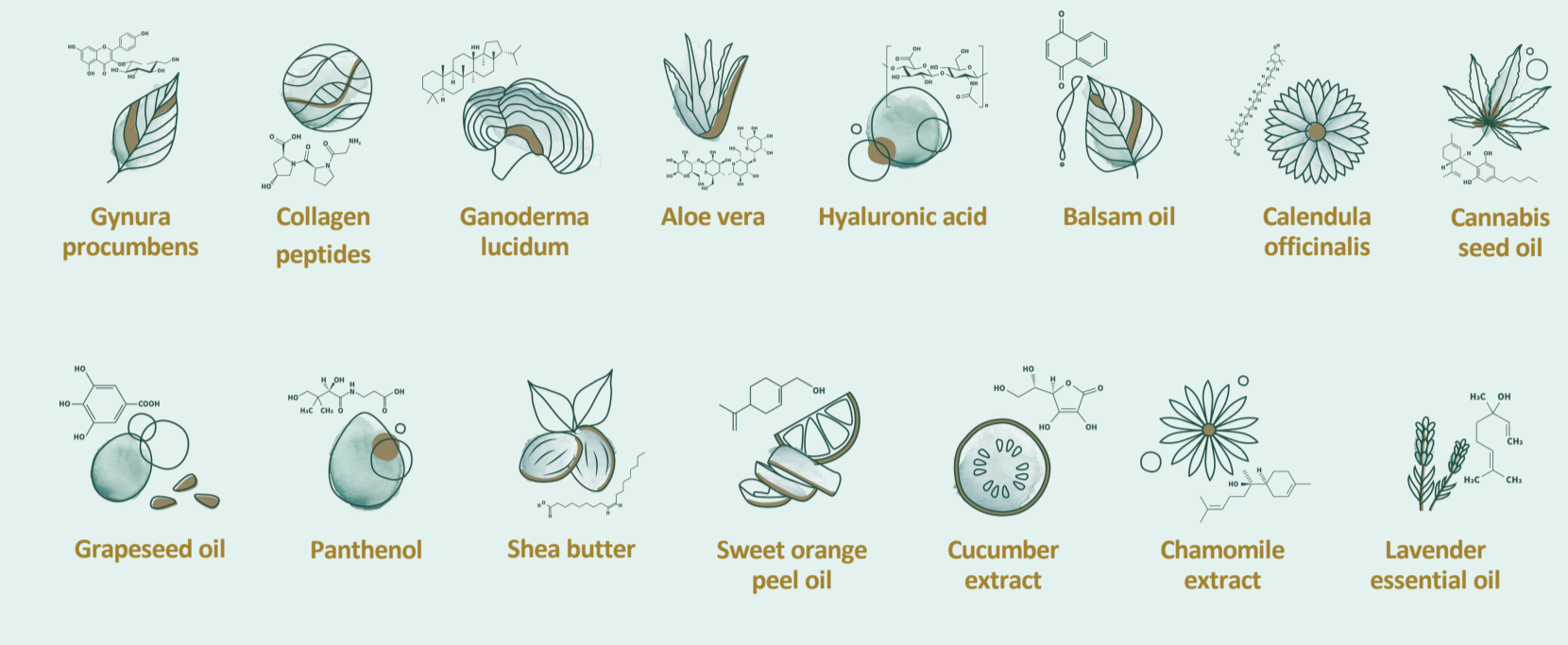
METHODS & MATERIALS

Eight oncology patients aged 52 to 92 (both male and female) with various wound aetiologies participated in this study. Wound management protocols involved the application of an antiseptic wash and solution, followed by eUSKIN® Recovery oil, eUSKIN® Intensive Cream, and eUSKIN® Intensive Gel, with or without gauze or foam dressing based on wound characteristics. Patients were administered the regimen twice daily, with increased frequency for cleanliness. Written informed consent was obtained from the patients in accordance with GDPR regulations.

Key ingredients in our products

The choice of each bioactive component in our products has been meticulously made, with thorough consideration of scientific evidence.

We develop products based on natural ingredients such as Gynura procumbens, Aloe vera, Calendula officinalis, Cucumber extract, Balsam oil, and Ganoderma lucidum. These ingredients are rich in vitamins, minerals, and naphthoquinones, serving as natural antioxidants¹² and being rich in Gly-Pro-Hyp, while also possessing excellent anti-inflammatory properties¹³. Additionally, we incorporate highly bioactive molecular ingredients such as Hyaluronic acid and Atelocollagen to enhance wound healing and improve skin health.



RESULTS

Patients exhibited improvements in wound reduction or closure within weeks of treatment initiation. In addition, during the treatment the presence of xerosis and erythema is reduced and in some cases the occurrence of hyperpigmentation as well. Despite diverse comorbidities and wound aetiologies, all patients reported no adverse reactions to the eUSKIN® products, indicating good tolerability.

Radiation dermatitis

Example of characteristic radiation dermatitis after radiotherapy in post-operative site of sarcoma, in a 52 y.o. female patient, with breast cancer. Results shown improvement and complete skin regeneration by day 22 after application of eUSKIN® Starter Duo products 3 times daily.



Unhealing malignant wound

Example of a 14-month unhealing malignant wound in a 62 y.o. female cancer and diabetic patient. The wound was repeatedly infected. Results shown vast improvement and dryness at the wound site by week 3 and skin regeneration by week 16 with application of eUSKIN® Starter Duo products combined with gauze (twice daily in a clean wound) for 16 weeks.



Pressure Ulcer Grade I

Bed sores, accompanied with skin discoloration, cellulitis (inflammation of body tissue, causing swelling and redness) and skin sensitivity in a 68 y.o. male patient with cancer and diabetes. Application of eUSKIN® Starter Duo products (twice daily in a clean wound) combined with gauze for 18 weeks.



Pressure ulcer Grade II

Bed sores in a 71 y.o. female non-diabetic cancer patient under chemotherapy protocols. The patient showed some skin loss and damage involving the top-most skin layers together purple and black skin discoloration. Application of eUSKIN® Recovery Oil and Intensive Gel for the first 3 weeks and then application of the eUSKIN® Starter Duo products (twice daily in a clean wound) combined with foam dressing to reduce pressure for 20 weeks.



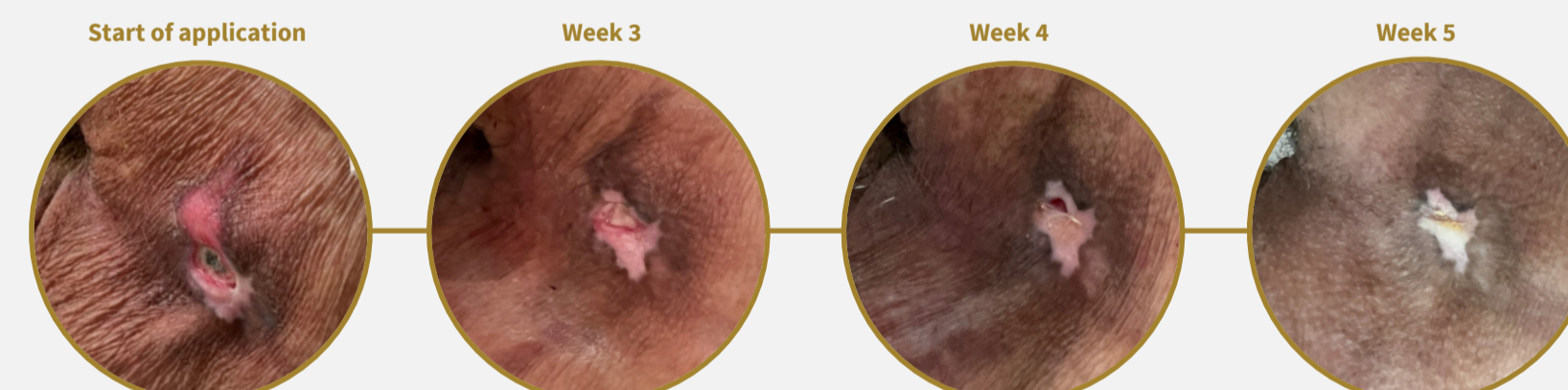
Pressure ulcer Grade II

Pressure ulcer accompanied with skin damage, cellulitis and open wound; also presenting rectal prolapse (haemorrhoids) and epidermolysis in a 71 y.o. cancer bed-ridden male patient with uncontrolled diarrheal episodes. Application of eUSKIN® Starter Duo (twice daily in a clean wound) for 2 weeks resulted in reduction of the skin damage and haemorrhoidal shrinkage.



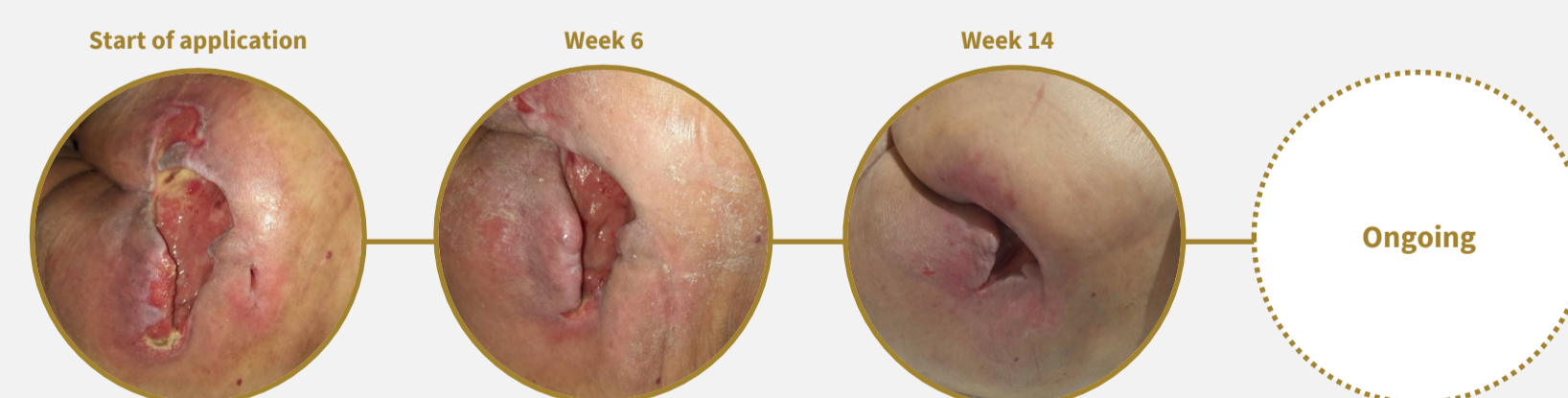
Pressure ulcer Grade III

Bed sore in a 92 y.o. cancer and diabetic female patient under palliative care with evident necrosis and damage to the skin patch, limited to the skin layers. Application of eUSKIN® Starter Duo products combined with gauze (twice daily in a clean wound) for 5 weeks showed skin site rescue and dermogenesis.



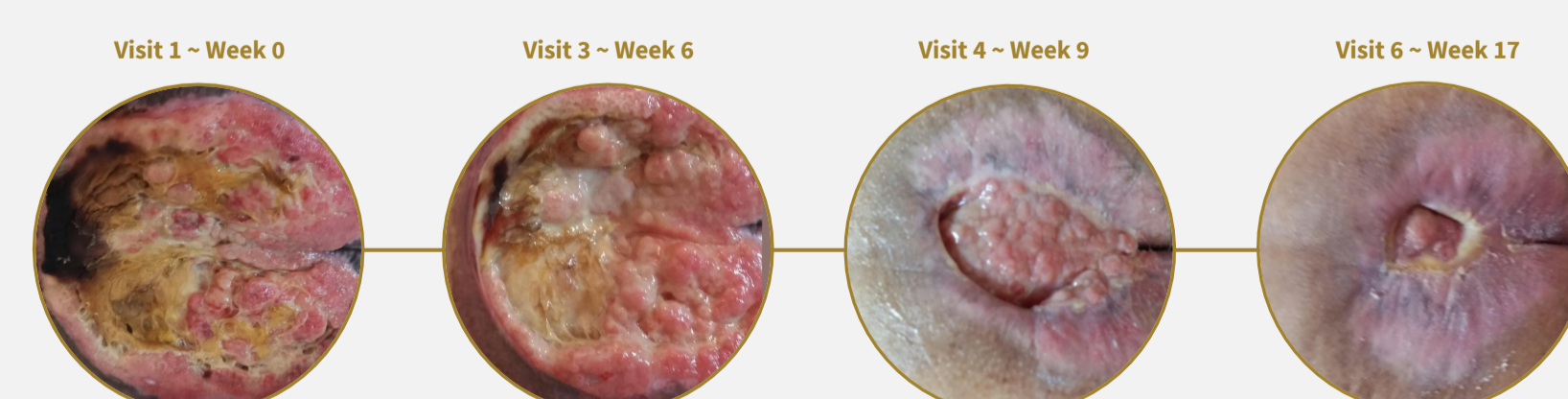
Pressure ulcer Grade IV

Deep bed sore at a grade IV stage, characterized by severe tissue damage, with a reddish enlarged crater (~15cm) in a 84 y.o. female cancer patient with gastrostomia and Alzheimer disease. Application of eUSKIN® Recovery Oil and Intensive Gel for the first 3 weeks (twice daily in a clean wound) and application of the eUSKIN® Starter Duo products (twice daily in a clean wound) combined with foam dressing to reduce pressure for 14 weeks. The affected area showed signs of tissue regeneration, absent of infection and a vastly reduced crater of 3cm.



Pressure ulcer Grade IV

Pressure ulcer grade IV in a hospitalised bedridden diabetic male patient under palliative care. The patient showed localised necrosis and extended damage to the skin patch and underlying bone structure. Application of eUSKIN® Starter Duo products combined with zinc paste was used twice daily in a clean wound for 17 weeks, after removing the necrotic tissue using sharp debridement method.



CONCLUSION

The development of an effective wound care protocol for oncology patients is crucial. These case studies provide valuable insights into the efficacy and tolerability of eUSKIN® products in wound management for this patient population. Cases of radiation dermatitis showed rapid healing and complete skin regeneration by day 22. Significant improvements were observed in unhealed malignant wounds, with notable progress evident by week 3. Epidermal ulcers reduced within the initial three weeks of using eUSKIN® products. Encouraging results were also noted in Grade IV pressure ulcers, suggesting the potential of eUSKIN® products as valuable tools in the healing process of challenging wounds. The enhancements in wound healing and patient comfort highlight the potential benefits of integrating eUSKIN® products into comprehensive wound care regimens. Further research is necessary to validate these findings and refine treatment protocols for diverse patient populations.

