# GUIDANCE FROM THE ESKIMO GROUP RECOMMENDATIONS: AN ALGORITHM FOR DERMOCOSMETIC USE IN THE MANAGEMENT OF CUTANEOUS SIDE EFFECTS ASSOCIATED WITH TARGETED THERAPY IN ONCOLOGY

**B. DRENO[1], RJ. BENSADOUN[2], P. HUMBERT[3], J. KRUTMANN[4], T. LUGER[5], R.TRILLER[6], A. ROUGIER[7], S. SEITE[7]**

*[1]CHU, Hôtel Dieu, Department of Cancero-Dermatology, Nantes, France, [2]CHU, Department of Radiological Oncology, Poitiers, France, [3]University Hospital, Department of Dermatology, Clinical Investigation Centre, Besançon, France, [4]IUF-Leibniz Research Institute for Environmental Medicine, Heinrich-Heine-University, Düsseldorf, Germany, [5]University of Münster, Department of Dermatology, Münster, Germany, [6] Hertford British Hospital, Centre of Dermatology, Levallois-Perret, France, [7]La Roche-Posay Dermatological Laboratories, Asnières, France*

## INTRODUCTION

Cutanenous toxicity with targeted chemotherapeutic agents is common. With improved survival rates, reduced systemic toxicity and increasing indications, this is becoming a substantial problem for patients. Designed to target specific molecular tumour growth factors, these agents also target growth factors in the skin and its appendages. The exact mechanisms for the development of these symptoms are only partly understood. However the molecular, histological and clinical osbservations suggest that targeted chemotherapies ultimately disturb skin barrier function. Clinical symptoms (Table 1) include disruption of the pilosebaceous follicles causing folliculitis, alteration of the skin barrier causing xerosis, cracked skin and pruritus. Other reactions include: hand and foot erythema, increased sensitivity to ultraviolet radiation, hyperpigmentation, and altered phaneres with paronychia. In addition to disturbed epidermal barrier function, the skin is more sensitive to allergens and susceptible to infection. Using inappropriate personal hygiene products often worsens these effects while lesion camouflage may improve patient well-being. Little information is currently available in the literature for the adjunctive use of dermatological skin care in the pharmaceutical management of these reactions.

Table 1: Symptoms of cutaneous toxicity

| Symptom | Dysfunction | Onset |
|---|---|---|
| **Folliculitis (skin rash)** | Disruption of the pilosebaceous follicle | Treatment week 1 |
| **Xerosis, cracked skin and pruritus** | Alteration of the skin barrier | After rash |
| **Paronychia** | Alteration of phaneres | Treatment month 2-4 |
| **Hand and Foot Syndrome** | Alteration of the skin barrier | Treatment week 2 or 3 |

The objective of this treatment algorithm is to provide guidance for the appropriate use of dermatological cosmetics to help improve the management of cutaneous skin reactions following targeted chemotherapy.

## MATERIAL AND METHODS

The ESKIMO group is comprised of six European dermatologists and one oncologist. The group performed an extensive literature review followed by a consensus meeting to discuss the different cutaneous toxicities related to targeted chemotherapy as well as to quality of life. The specialists discussed the appropriate use of dermatological cosmetics for the different cutaneous skin reactions according to the available literature. The group's recommendations were completed with current practices and personal experience.

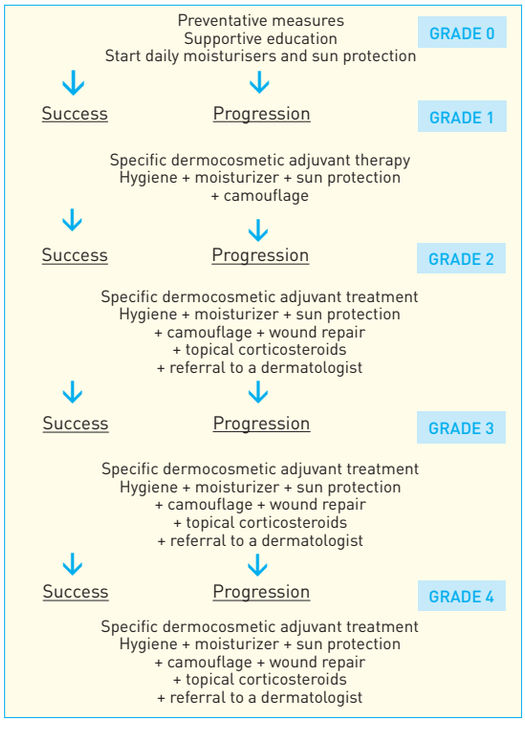
## RESULTS

Dermatological skin care was defined as cleansing, moisturising, personal hygiene and photoprotection using products with a proven tolerance profile, tested on pathological skin. The group agreed that proactive treatment is critical as toxicity has been observed to arise as early as two days after the first treatment. There is no clear evidence which patients may be more susceptible, although older age and atopic predisposition are correlated with a higher incidence of xerosis. Proactive intervention may help to obtain a maximum benefit from EGFRI treatment and prevent dose change or interruption. Early education and continued encouragement throughout treatment have been shown to benefit quality of life. Skin cleansing, skin hydration, photoprotection, dermatologist referral and management of skin sensitivity should be considered when managing cutaneous side effects during and after targeted chemotherapy (Table 2).

Table 2: Strategies for the management of cutaneous side effects

- Skin cleansing is appropriate with syndets with a pH of 5.5.
- Apply daily a non-comedogenic moisturising cream on both the face and body, irrespective of the chemotherapeutic agent prescribed to control rash and xerosis.
- Prefer oil in water vehicles for medical treatments and emollients containing humectants such as urea 5-10% or niacinamide.
- Apply broad-spectrum sunscreen to the face and other exposed areas (i.e. neck and arms). Use of SPF 15+ / UVA-PF level according to phototype or expected photosensitivity.
- Improve well-being by covering disfiguring erythema and pallor with non-comedogenic make up. Avoid occlusive make up if folliculitis is severe.
- Avoid products containing fruit acids, anti-bacterials or benzoyl peroxide. They are irritant and may be harmful. Furthermore, they have not shown to be helpful to manage rash.
- Antiseptics and wound healing creams have shown certain advantages in managing fissures and paronychia.

Figure 1: Algorithm for the management of cutaneous toxicity




## CONCLUSION

The working group considers that all symptoms including folliculitis, xerosis, fissures, as well as hand and foot syndrome are linked to skin barrier dysfunction. Maintaining skin barrier function using appropriate cosmetic products can control the severity of these symptoms. The algorithm proposes (Figure 1) a baseline treatment followed by additional suggestions depending on symptom severity.

## REFERENCE

1 - Dreno B, Bensadoun RJ, Humbert P, Krutmann J, Luger T, Triller R, Rougier A, Seité S. Algorithm for dermocosmetic use in the management of cutaneous side-effects associated with targeted therapy in oncology. *J Eur Acad Dermatol Venereol*. 2013

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