

A combined *in vitro* and *in vivo*
approach to evaluate wound healing
management with a new healing
dermocosmetic product

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Disclosure of conflicts of interest

To adjust complete

I declare the following paid or unpaid consultancies, business interests, grants and research support or sources of honoraria payments for the past three years, and anything else which could potentially be viewed as a conflict of interest:

[Insert name of the company] / [Insert nature of the interest]

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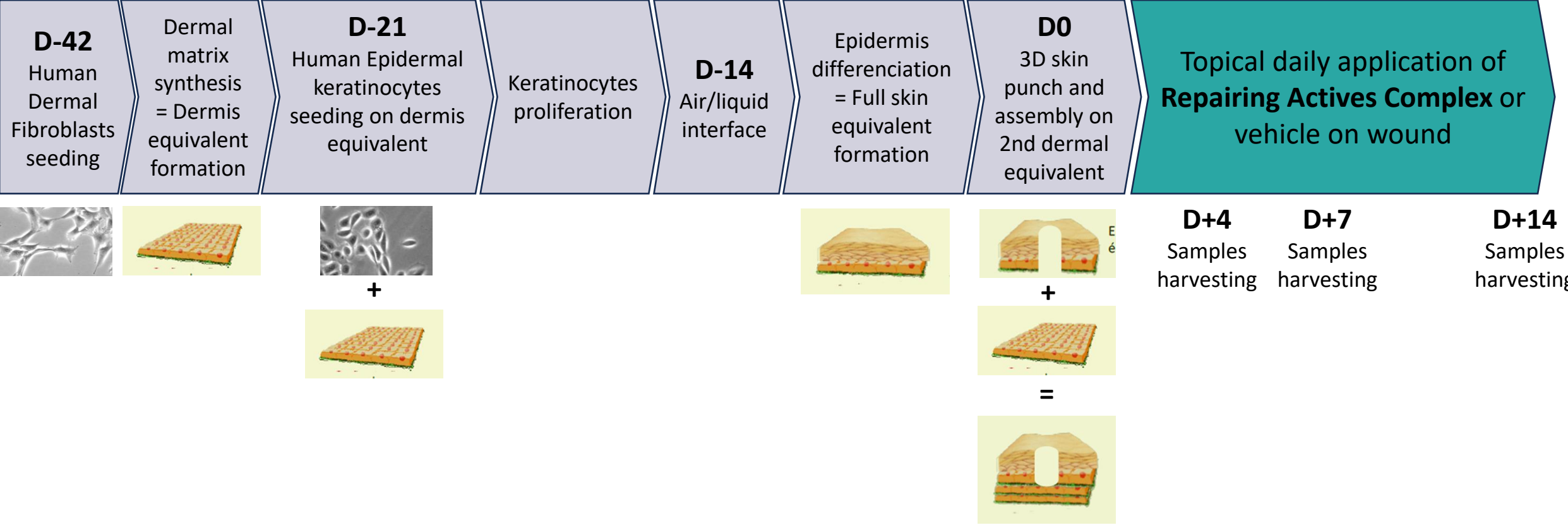
Nothing to declare

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3D in vitro model study: protocole

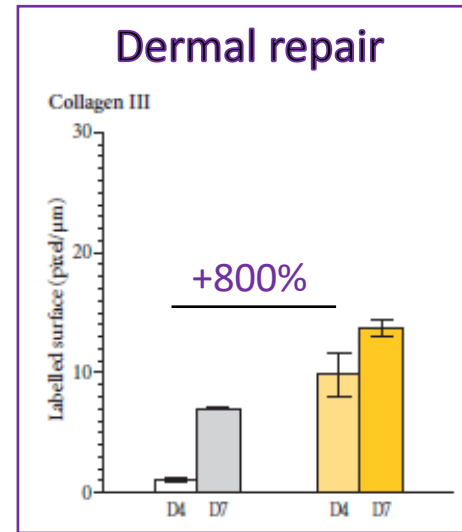
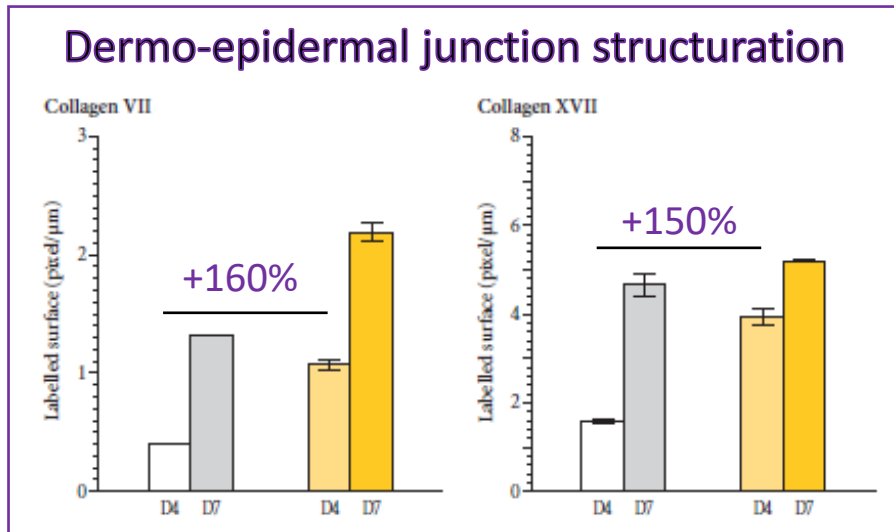
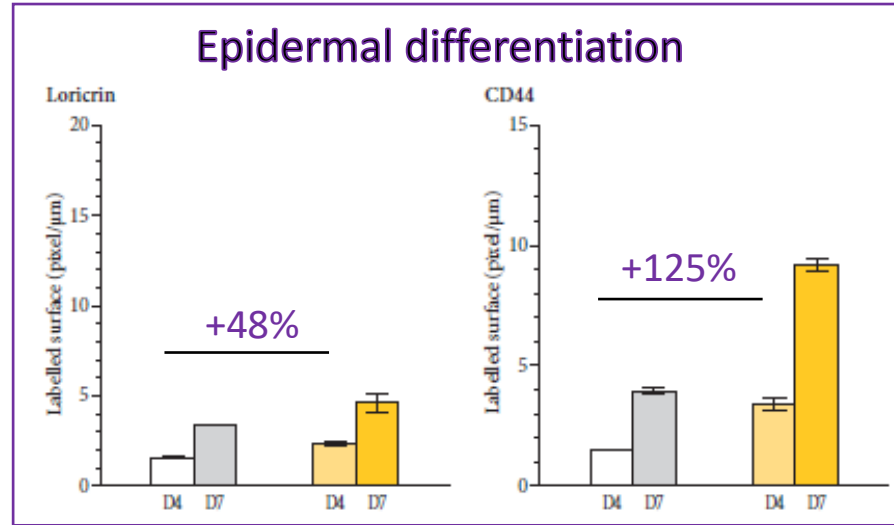
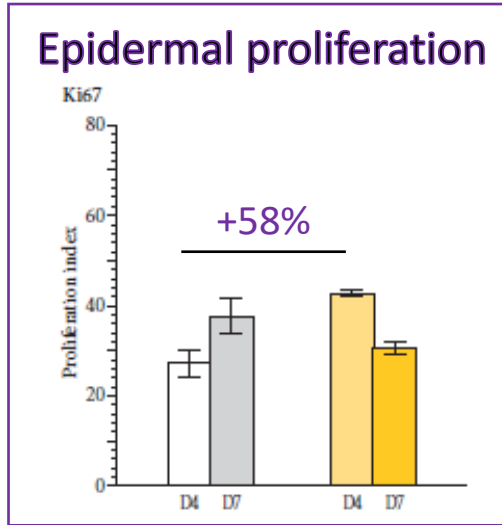


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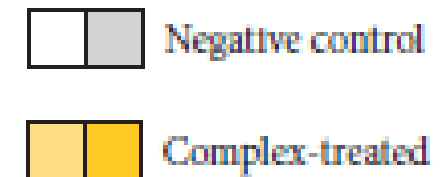


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3D in vitro model study: results on biomarkers



At D4, the **Repairing Actives Complex** increased the **biomarkers** involved in reconstruction of **all the layers** of the skin



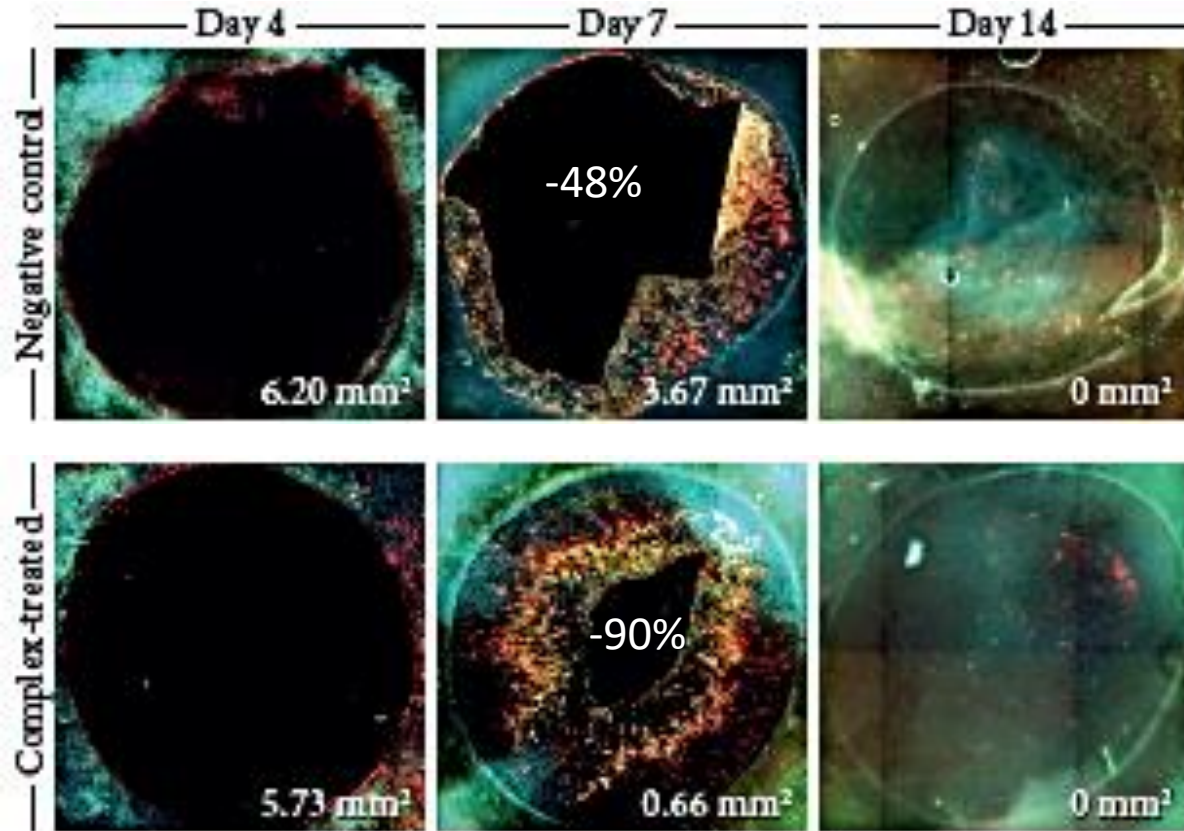
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3D model study: results on wound surface area

Immunostaining, top view of the wound
(merge of **DAPI**, **Keratin 14**, **Involucrin**)



At D7, the **wound** area was **significantly reduced** with the **Repairing Actives Complex**

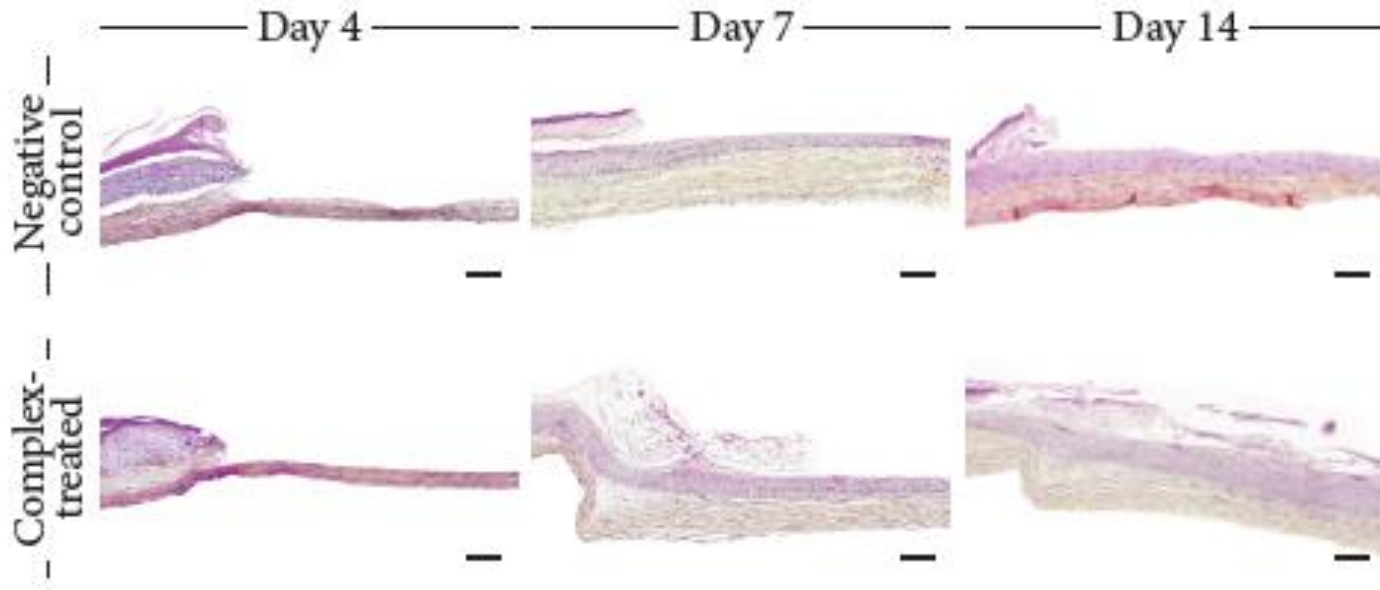
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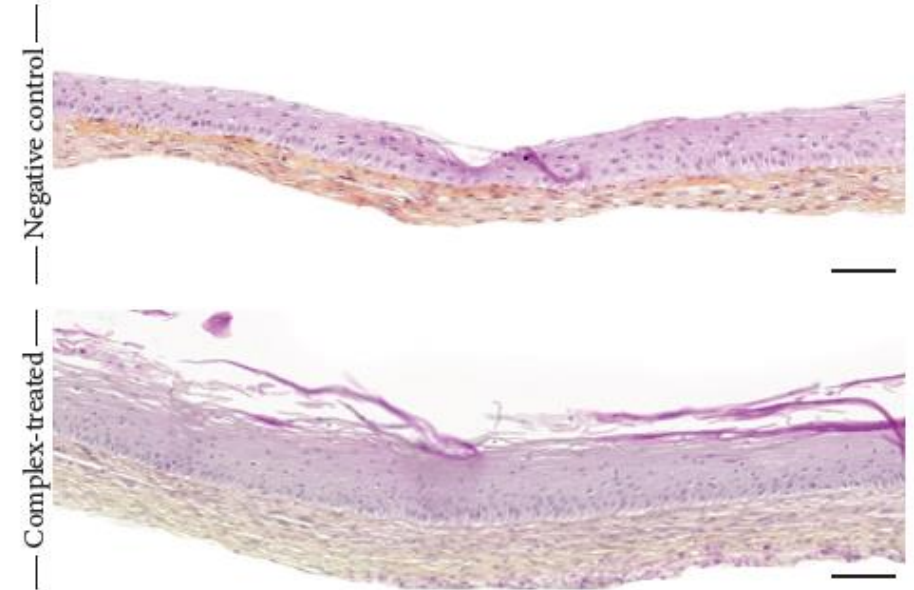
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3D model study: histological analysis on wound closure

B. Histological analysis of wound closure



C. Close-up of wound closure at day 14



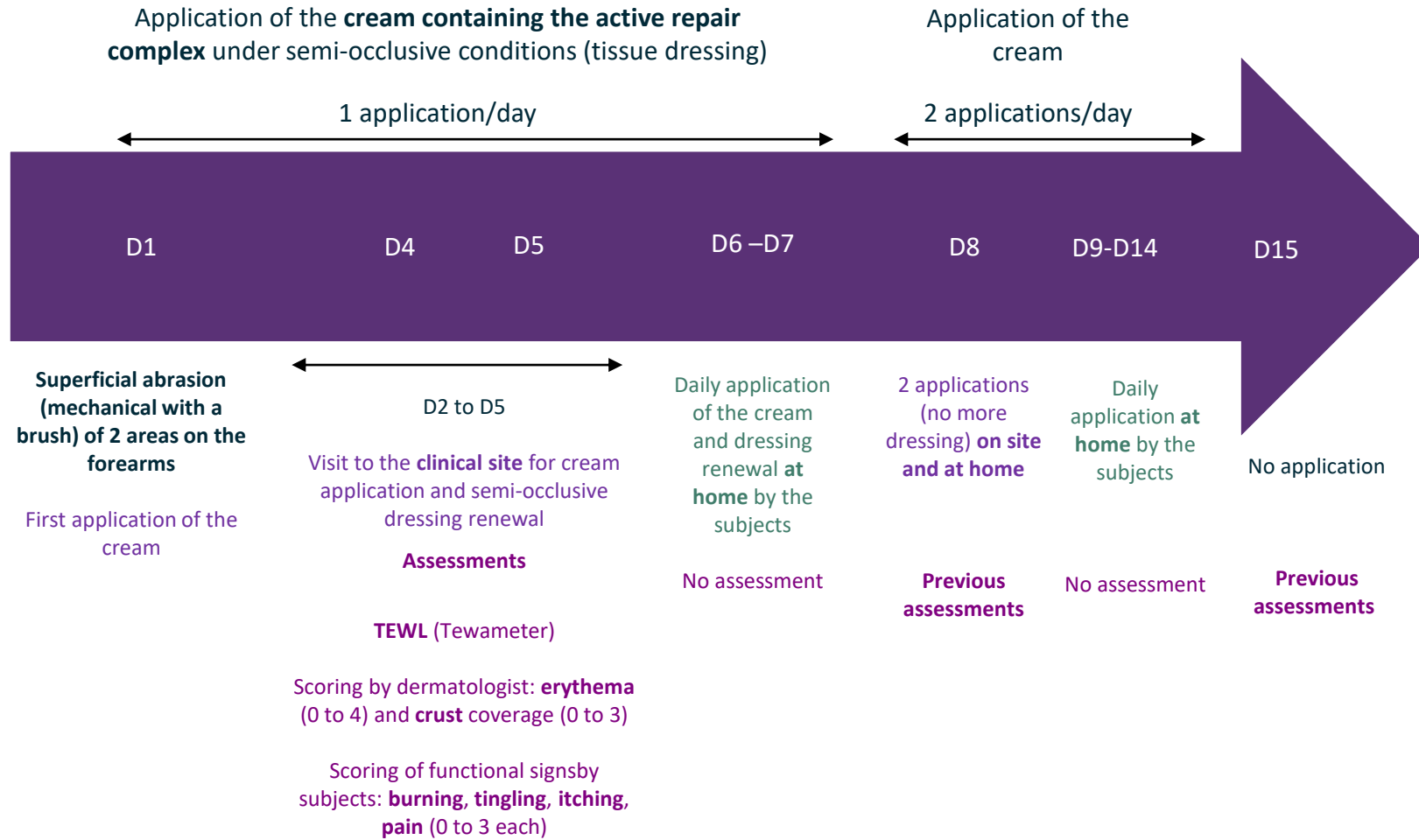
The patented active repair complex conditions showed at D14 a complete re-epithelialization of the wound resulting in a contiguous and well-organized epidermis, fully stratified including terminally differentiated stratum corneum, in contrast with the untreated control wound still in an immature stage.

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Clinical study: protocol

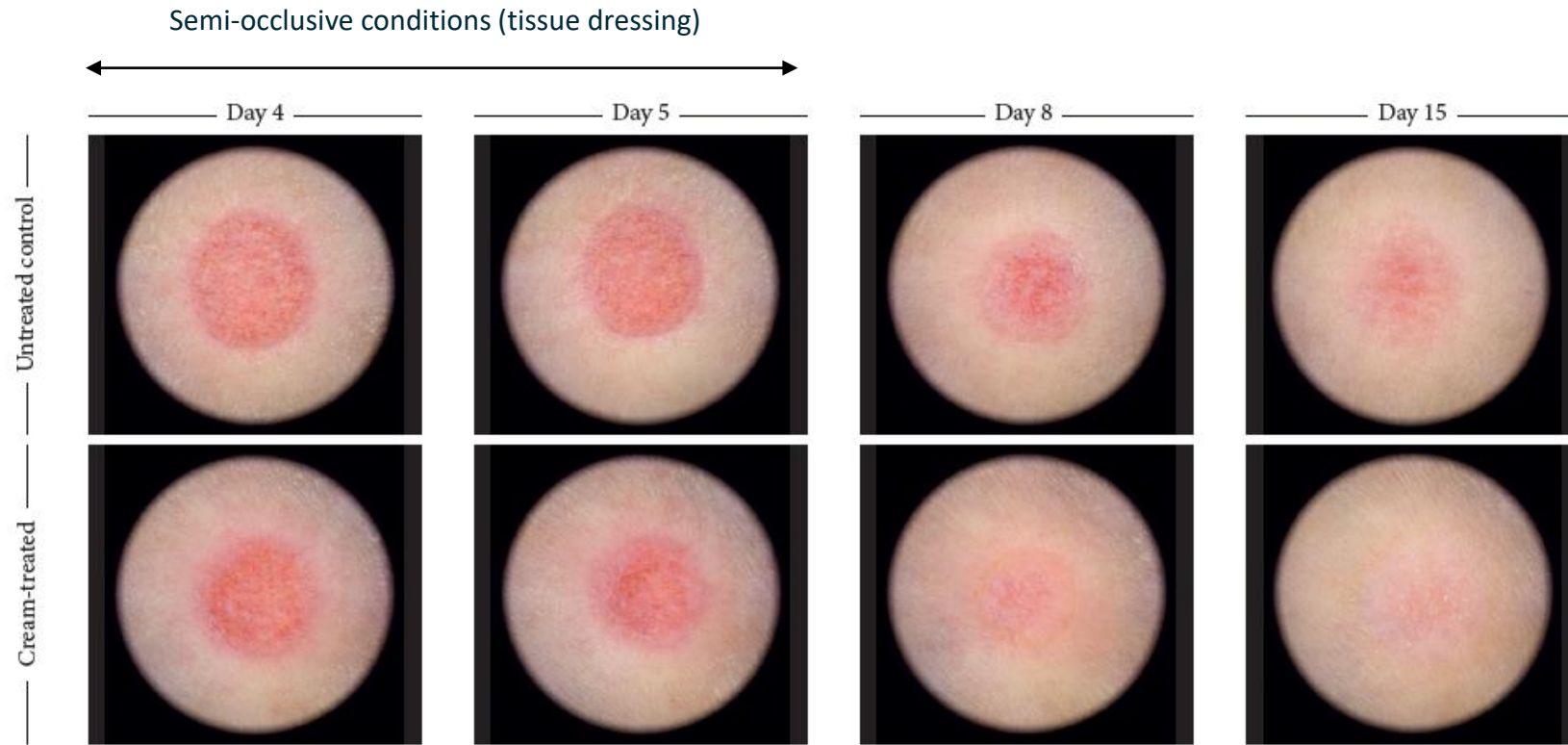


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Clinical study: representative pictures of wounds



The cream-treated conditions showed a better wound healing at all time points.

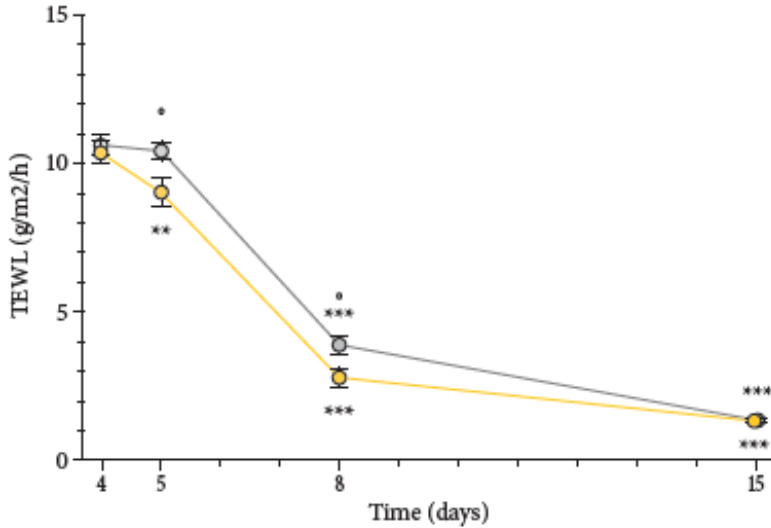
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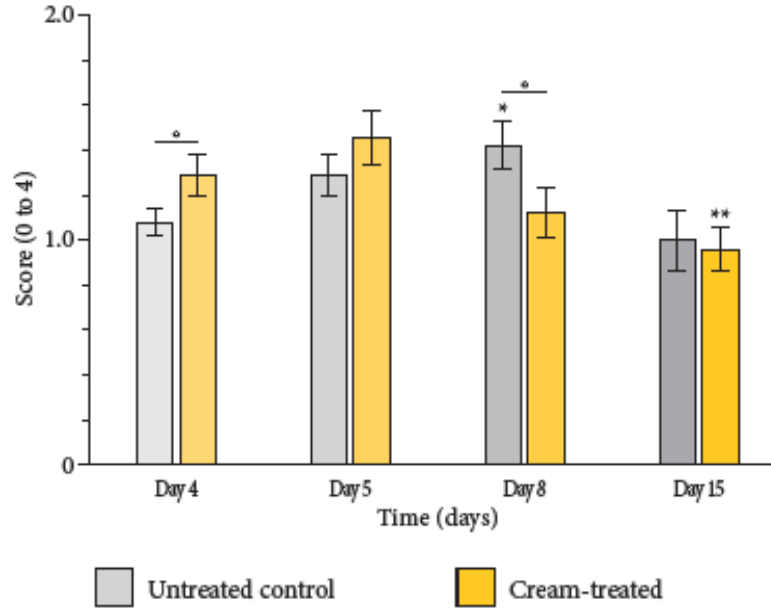
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Clinical study: TEWL and global clinical scores

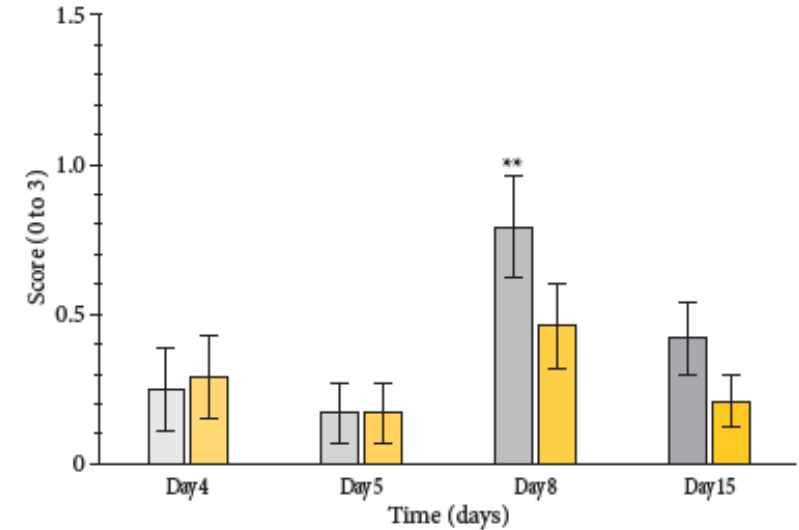
A. TEWL measurement



B. Erythema



C. Crust coverage



A significant improvement of the TEWL, erythema and crust coverage at D8 and also at D5 for TEWL, with the cream conditions vs the untreated control one (Wilcoxon test).

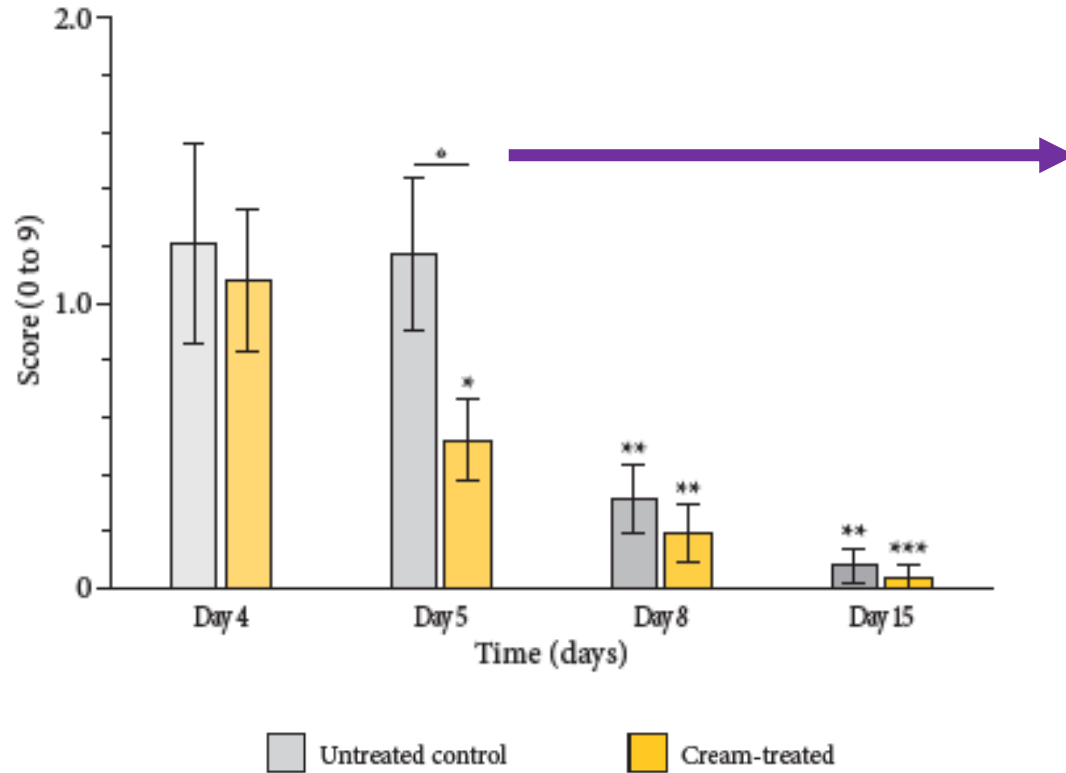
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Clinical study: functional sign scores

D. Functional sign scored by subjects



At D5, significant improvement of the 3 parameters investigated (Wilcoxon test):

- 64% burning
- 72% tingling
- 55% itching

No pain at baseline and during the study
No adverse effect

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Conclusion / Take home message

- This new healing dermocosmetic product demonstrates significant beneficial activities on natural healing process *in vitro and* contributes to a better skin repair *in vivo*.
- In addition, it improves skin comfort and therefore compliance.
- This dermocosmetic product is dedicated to acute superficial lesion as in post-surgery (episiotomy, C-section, adherent scares), and in post-act (chemical peeling, laser), and gynecological.
- A very good tolerance including gynecological indications.

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