

CHALLENGE ALMIRALL

Sponsors Goal

Almirall aims to find innovative technological solutions that can add value across multiple dermatological indications such as atopic dermatitis, psoriasis, and hidradenitis. The goal is to address the unmet medical need for chronic itch relief and improve patients' quality of life.

The problem

Chronic itching is a debilitating symptom affecting numerous patients with dermatological conditions like atopic **dermatitis**, **psoriasis**, and **hidradenitis suppurativa**. This leads to an overwhelming need to scratch, causing skin lesions, bleeding, and infections. It significantly interferes with patients' rest and sleep, impacting their mood and daily performance. Approximately 70% of patients with these conditions report that itch affects their sleep quality and overall quality of life [1].

The context

Currently, various topical treatments and behavioral therapies are being used to manage itching, but these methods often provide limited relief and do not address the root cause. In one of our clinical trials, we are capturing data on scratching behavior through wearable devices to better understand the problem. However, there is still a need for innovative technological solutions that can offer more effective and personalized itch relief.

The challenge

How can we develop effective technological solutions to alleviate chronic itch in patients with dermatological conditions so it can improve their quality of life?

Idea words

Smart wearable devices, Mobile apps, Biofeedback, Smart clothing, Virtual Reality (VR), Augmented Reality (AR), Itch management, Non-pharmacological treatments, Patient monitoring, Real-time feedback.

References

1. Misery, L., & Ständer, S. (2017). *Pruritus*. Springer.
2. Vakharia, P. P., & Silverberg, J. I. (2019). *New and Emerging Treatments for Atopic Dermatitis*. *Annals of Allergy, Asthma & Immunology*, 123(2), 158-162.
3. Itch and atopic dermatitis: an overview - PubMed ([nih.gov](#))
4. Management of Itch in Atopic Dermatitis - PubMed ([nih.gov](#))
5. Itch in Atopic Dermatitis Management - PubMed ([nih.gov](#))
6. Psoriasis-associated itch: etiology, assessment, impact, and management - PubMed ([nih.gov](#))
7. Itch in Psoriasis Management - PubMed ([nih.gov](#))
8. Itch and pain by lesion morphology in hidradenitis suppurativa patients - PubMed ([nih.gov](#))
9. Itch in Hidradenitis Suppurativa/Acne Inversa: A Systematic Review - PubMed ([nih.gov](#))