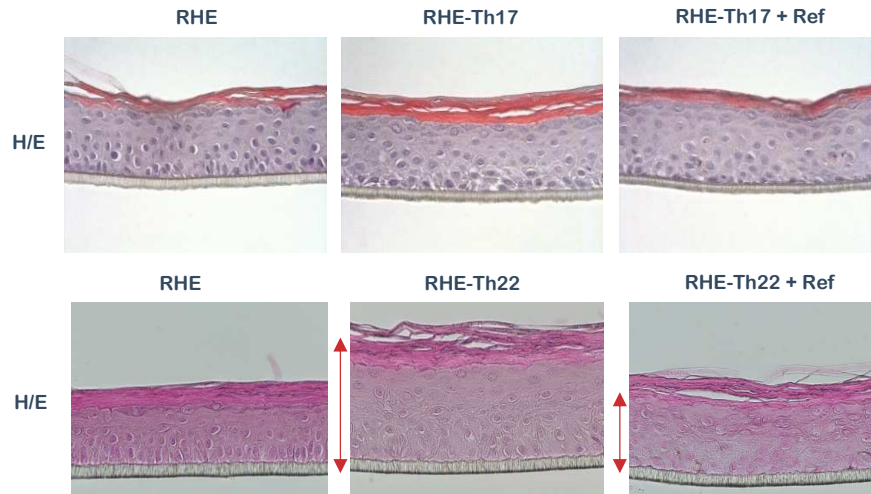


PSORIASIS: *in vitro* models featuring inflammation and hyperplasia

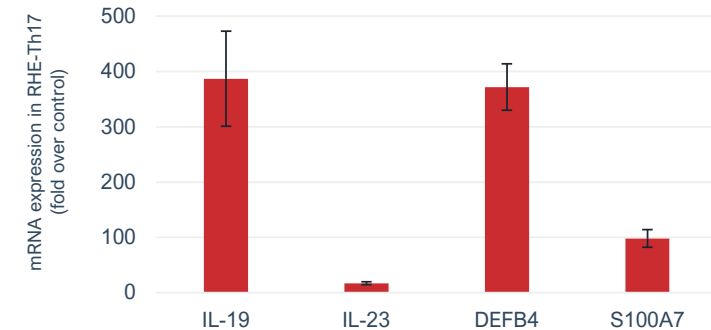


Psoriasis is a frequent multifactorial chronic inflammatory skin disease affecting approximately 2-3 % of the population. Th-17 and Th-22 T-cell subsets play a major role in the establishment of psoriasis. Th-17 lymphocytes are highly activated in psoriatic skin, releasing inflammatory cytokines involved in psoriasis plaques. Additionally, Th-22 secreted cytokines activate the proliferation and differentiation of keratinocytes, resulting in the specific hyperplasia of psoriatic epidermis. In response to the need for evaluating beneficial compounds to cure psoriasis, StratiCELL has developed a 3D *in vitro* human reconstructed epidermis stimulated by Th-17 or Th-22 cytokines, to respectively reproduce psoriasis features of inflammation and hyperplasia.

Description	Replicates psoriasis features : Th17-induced inflammatory status or Th22-induced epidermal hyperplasia
Skin model	<ul style="list-style-type: none"> - NHEK-Th17: Normal Human Epidermal Keratinocytes treated with Th17-type interleukins - RHE-Th17: Reconstructed Human Epidermis treated with Th17-type interleukins - RHE-Th22: Reconstructed Human Epidermis treated with Th22-type interleukins
Positive reference	<ul style="list-style-type: none"> - IκB kinase (IKK) inhibitor to reduce the Th17-induced inflammatory status - Tacrolimus to reduce the Th22-induced hyperplasia
Endpoints	<p>1. Morphological analysis and thickness measurement based on Hemalun/Eosin (H/E) histology staining images:</p> <p>2. Expression of genes playing key roles in inflammation and immune response, by individual RT-qPCR:</p>



2. Expression of genes playing key roles in inflammation and immune response, by individual RT-qPCR:



3. Quantification of IL-19 proteins by ELISA assay:

