



Vitiligo is the most common depigmenting skin condition, its prevalence is estimated at 1% of the world population. This pathology results from a selective disappearance of melanocytes from the basal layer of the epidermis.

Vitiligo is a complex pathology with imprecise origin. The activation of the immune system (cytotoxic action of CD8 T cells and secretion of cytokines by memory T lymphocytes) as well as a lack of adhesion of melanocytes seem to be at the source of the detachment of melanocytes from the basal lamina, called melanocytorrhagy. StratiCELL offers a model of reconstructed human epidermis stimulated with various inflammatory cytokines in order to reproduce this typical melanocytorrhagy observed in vitiligo.

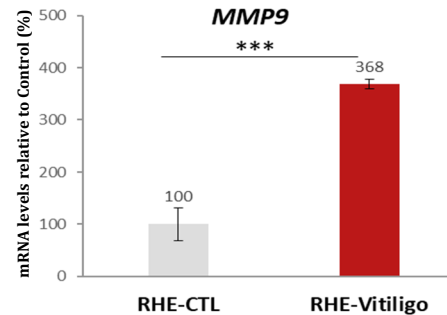
SKIN MODELS:

- **RHE-VIT:** Reconstructed Human Epidermis upon exposure to inflammatory cytokines inducing melanocytorrhagic **VIT**iligo

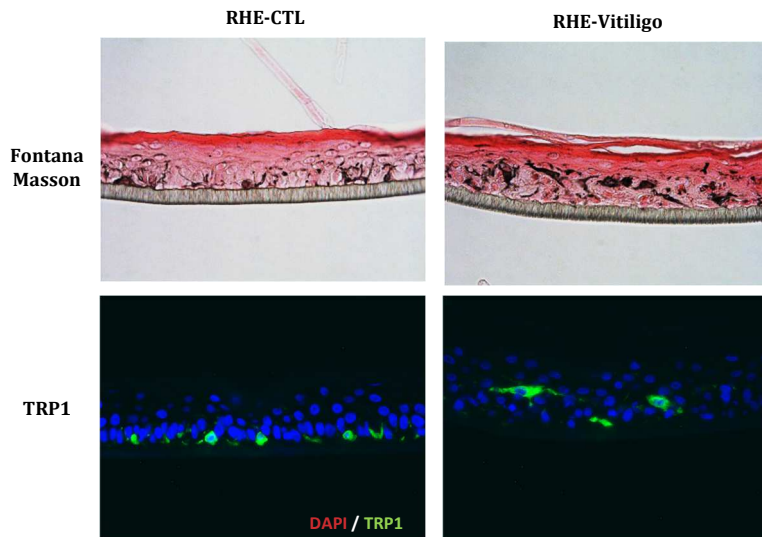
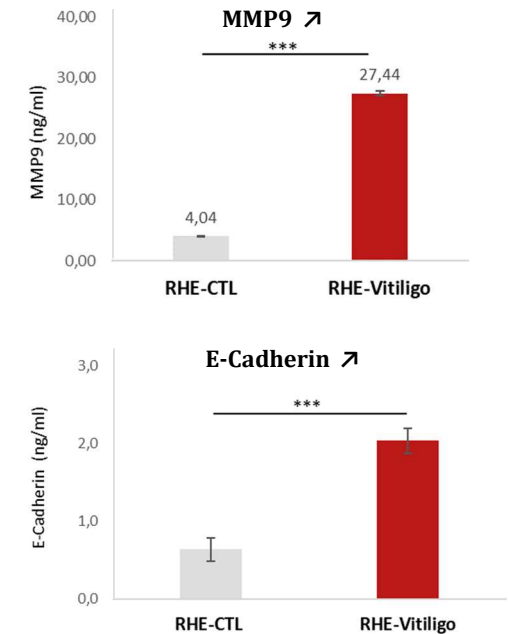
ENDPOINTS:

- Expression levels of **key genes** involved in vitiligo feature (MMP9), by RT-qPCR
- Quantification of **cytokines** released in culture supernatants (MMP9 and E-cadherin)
- **Histological analysis:** Fontana Masson staining, Immunofluorescence (TRP1)

Gene expression levels evaluated by RT-qPCR (***. $p < 0,001$)



Cytokines release by ELISA (***. $p < 0,001$)



Fontana Masson staining (up) and TRP1 immunofluorescence (down) of the RHE control (CTL) and vitiligo tissues after 24h treatment.