

# Human skin barrier recovery

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The study investigates if how the skin recovers after barrier disruption by tape-stripping and what the effects the application of a formulation is on this process. Lipophilic formulations are commonly used in the treatment of atopic eczema, yet,...

<b>Ethische beoordeling</b>	Positief advies
<b>Status</b>	Werving tijdelijk gestopt
<b>Type aandoening</b>	-
<b>Onderzoekstype</b>	Interventie onderzoek

## Samenvatting

### ID

NL-OMON28503

### Bron

Nationaal Trial Register

### Verkorte titel

HSBR

### Aandoening

Atopic Eczema, skin barrier, stratum corneum

## Onderzoeksproduct en/of interventie

## Uitkomstmaten

### Primaire uitkomstmaten

The lipid composition of the stratum corneum. The lamellar and lateral lipid organization.

## Toelichting onderzoek

### Achtergrond van het onderzoek

Information not provided by researcher.

## **Doel van het onderzoek**

The study investigates if how the skin recovers after barrier disruption by tape-stripping and what the effects the application of a formulation is on this process. Lipophilic formulations are commonly used in the treatment of atopic eczema, yet, how these formulations exert their effect is unknown. In this study the effects of the formulation on the barrier function measured as trans epidermal water loss and the lipid composition and organization of the other most layer of the skin: the stratum corneum, are investigated. It is hypothesized that the formulation will affect the lipid composition of the stratum corneum and this changes towards a composition with better barrier properties thereby improve the skin barrier.

## **Onderzoeksopzet**

The trans epidermal water loss will be monitored at day 0, 1, 2, 3, 7, and 16 after barrier disruption. The lipid composition is measured by acquiring stratum corneum material at day 16 by tape stripping. Tape strips are extracted and analyzed using liquid chromatography and mass spectrometry. The lateral organization is studied at day 16 using attenuated total reflectance Fourier-transform infrared spectroscopy. The lamellar organization is studied using small angle x-ray diffraction of biopsy obtained at day 16.

## **Onderzoeksproduct en/of interventie**

Treatment with a venix caseosa based formulation

## **Contactpersonen**

### **Publiek**

[default]  
The Netherlands

### **Wetenschappelijk**

[default]  
The Netherlands

## **Deelname eisen**

## **Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)**

- Age between 18-40
- Caucasian

## **Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)**

- Abundant hair presence on the ventral forearms;
- Unnatural abnormalities on one of their ventral forearms (e.g. skin lesions, tattoos);
- Subjects using any systemic drug therapy (e.g. cholesterol-lowering drugs, insulin related drugs, steroids and immunosuppressants);
- Chronically inflammatory disease;
- Dermatological disorders or a history of dermatological disorders;
- History of drug abuse;
- Pregnancy;

## **Onderzoekopzet**

### **Opzet**

Type:	Interventie onderzoek
Onderzoeksmodel:	Anders
Blinding:	Open / niet geblindeerd
Controle:	N.v.t. / onbekend

### **Deelname**

Nederland	
Status:	Werving tijdelijk gestopt
(Verwachte) startdatum:	19-10-2015

Aantal proefpersonen: 15  
Type: Verwachte startdatum

## Ethische beoordeling

Positief advies  
Datum: 12-01-2018  
Soort: Eerste indiening

## Registraties

### Opgevolgd door onderstaande (mogelijk meer actuele) registratie

ID: 43983  
Bron: ToetsingOnline  
Titel:

### Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

### In overige registers

Register	ID
NTR-new	NL7003
NTR-old	NTR7193
CCMO	NL51870.058.14
OMON	NL-OMON43983

## Resultaten