



# Skin disorder

## How Korean Red Ginseng could have beneficial effects on atopic dermatitis



### Background



### Theory

#### The effect of Korean red ginseng (KRG) on atopic dermatitis (AD):

AD is a chronic or chronically relapsing, eczematous, severely pruritic inflammatory skin disorder. KRG has been shown previously to exhibit diverse biological effects including anti-inflammatory and antipruritic effects in a murine model. We aimed to investigate the beneficial effects of KRG on AD patients, to determine whether there was improvement in disease severity, skin barrier function, pruritus and sleep disturbance relief.



### Method

#### An open, non-comparative clinical study:

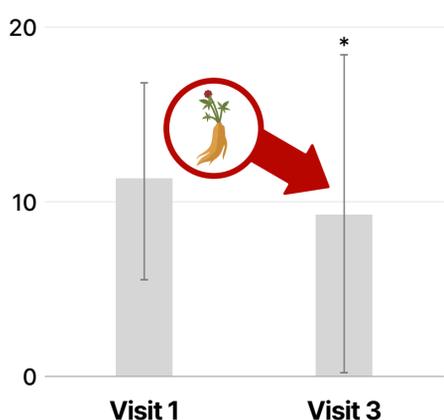
This study utilized KRG tablets to 41 patients with mild to moderate AD. The effects of KRG were assessed by measuring eczema area and severity index score, trans-epidermal water loss, the visual analogue scale, total amount of topical agents used in recent 8 weeks and investigator global assessment.



### Outcome

With 41 patients with mild to moderate AD (KRG 2g/day for patients over age of 17, KRG 1g/day for patients age between 4-7)

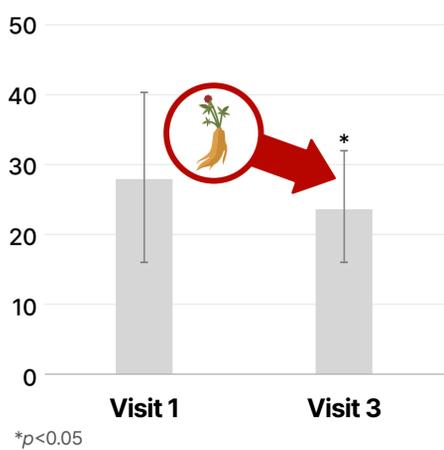
#### Eczema area and severity



EASI score was significantly lower after 8 weeks of oral KRG supplementation ( $p=0.026$ ).

EASI (eczema area and severity index): A tool to measure the extent (area) and severity of atopic eczema

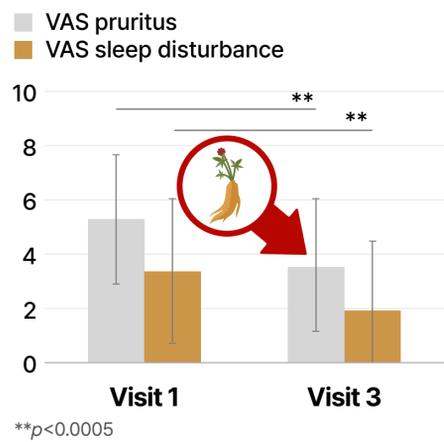
#### Trans-epidermal water loss



TEWL was significantly higher before the intake of KRG than after the intake of KRG ( $p=0.040$ ).

TEWL (trans-epidermal water loss): The most widely used objective measurement for assessing the barrier function of skin in healthy individuals but also patients with skin diseases that are associated with skin barrier dysfunction.

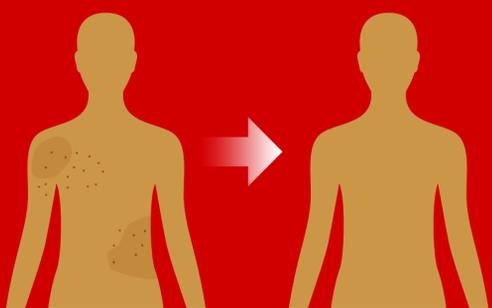
#### Pruritus and sleep disturbance



VAS scores for itching and sleep disturbance were significantly decreased in patients at visit 3 ( $p=0.0002$  and  $p=0.0001$ , respectively).

VAS (visual analogue scale): An index assessed by the patients themselves, assigning a numeric value to pruritus severity from 1 to 10, with 10 being most severe.

### Impact



#### Effect of Korean Red Ginseng on atopic dermatitis

Korean red ginseng not only improves the general well-being of the patients, but also **restores the skin barrier function through reduction of TEWL.**

### Conclusion

#### The benefit of Korean Red Ginseng on atopic dermatitis patients

This study suggest that KRG can be **safely used as a supplement remedy leading to clinical improvement of AD, can improve overall quality of life, and has potential for further development.**