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# Clinical study

IMEDEEN Derma One™

2008

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## IMEDEEN Derma One™

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Previous studies have shown IMEDEEN's exclusive Marine Complex stimulates the synthesis of collagen and elastin fibres to improve skin density and structure. Clinical tests also confirm that long-term use of IMEDEEN can boost hydration levels by up to 30%. Now the latest in-vitro research uses cultured skin equivalents to show that supplementation with IMEDEEN's Marine Complex significantly increases the amount of Laminin-332 and collagen type VII in the basement membrane.

The glycoprotein laminin-332 is a key component of the basement membrane and is of crucial importance for attaching the epidermis and dermis. Laminin-332 triggers the synthesis of new skin tissue and is involved in the creation, function and activation of skin cells. Type VII collagen is the major component of anchoring fibrils. It stabilizes the attachment of the basement membrane to the dermis.

From the age of 30, the bond between epidermal cells and the basement membrane starts to decrease. The loss of contact plays a part in the structural changes associated with skin ageing. A slowdown in cellular renewal is associated with loss of radiance and a dull, uneven complexion – the first visible signs of skin ageing.

The in-vitro research clearly shows that treatment with the key ingredient in IMEDEEN Derma One:

- Prolongs the life of the skin cells by slowing down the natural ageing process
- Stimulates the generation of new skin cells at the basal level and improves epidermal turnover. A tenfold increase in keratinocyte proliferation was observed after 11 weeks
- Improves the formation of basement membrane components which are essential for skin health

### Documented results

Heule F. An Oral Approach to the Treatment of Photodamaged Skin: a Pilot Study. The Journal of International Medical Research.

Heule F. The improvement of the consequences of cutaneous aging. Journal of the European Academy of Dermatology and Venereology

Kieffer ME and Efsen J. IMEDEEN in the treatment of photoaged skin: an efficacy and safety trial over 12 months. Journal of the European Academy of Dermatology and Venereology

### CLINICAL TRIALS (In-vivo)

These are studies involving female volunteers where scientists and dermatologists observe and measure the effects of the product. A 'controlled study' means that some participants receive the real product and others receive a placebo (without any active ingredients). A 'blind study' means only the investigating scientists know who is taking the real product. A 'doubleblind study' means neither the participants nor the investigators know who is taking the real product and who is taking the placebo.

### SCIENTIFIC STUDIES (In-vitro)

These are experimental studies carried out by scientists in a laboratory. Skin cells and tissues can be isolated and cultured to see how they react to certain ingredients.