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# Clinical study

IMEDEEN Prime Renewal™

2008

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Laboratory for skin substitutes, Lyon, France  
Dr. Odile Damour

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## IMEDEEN Prime Renewal™

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An in-vitro study was carried out to measure the effects on the dermal and epidermal structure using fully developed skin equivalents generated from skin fibroblasts volunteered by a 19 year old girl and 49 year old post-menopausal woman. The skin equivalents were treated with the IMEDEEN Prime Renewal active ingredients and a control group was cultured in parallel without treatment.

Although both the young and the old skin equivalents showed that treatment with IMEDEEN Prime Renewal improved the quality and structure of both the dermis and epidermis versus the control cultures, the results for the aged skin equivalent were much more impressive than those for the young skin and showed a greater increase in dermal density, higher production levels of both collagen and elastin and an improved epidermal structure. Moreover treatment with IMEDEEN Prime Renewal prolonged the life span of both young and aged skin equivalents, clearly demonstrating the anti-ageing effect of the active ingredients.

### Documented results

Poster presentations and abstracts:

Efficiency test of an oral cosmetic "IMEDEEN Prime Renewal" using a 3-D skin equivalent model. Sophie Lacroix, Sandrine Vidal, Charbel Bouez, Valérie Cenizo, Virginie Justin, Jana Vicanova, Pascal Sommer and Odile Damour.

Congress of Société de Pharmaco-Toxicologie Cellulaire, Sept 20-21, 2004. Paris.

Effect of 'IMEDEEN Prime Renewal' on dermal matrix and epidermal proliferation using skin equivalent model. Sophie Lacroix, Sandrine Vidal, Charbel Bouez, Valérie Cenizo, Virginie Justin, Jana Vicanova, Pascal Sommer and Odile Damour. 3rd International Symposium of the Science and Technology of Skin Engineering, 14-15.

### 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.