

# Four Week Anti-Aging Clinical Study

Performed by DERMAC LABORATORY INC.

DYNAMIS  
SKIN SCIENCE

Advanced Science for Great Skin

## Objective:

The study was to determine the efficacy of a topical product with Supplamine™ to improve the appearance and qualitative aspects of skin during a four-week usage period.

## Study Design:

A base cream with Supplamine™ was tested for its ability to improve skin smoothness, firmness, and hydration after a 4 week treatment. Seventy five volunteers with dry skin and exhibiting visible signs of aging on their face were treated with twice daily application.

Skin hydration on the cheek area of subjects was assessed via Impedance Meter, which is a well-documented and widely used device to measure changes in skin moisture content.

Skin firmness was assessed via Ballistometer by dropping a pendulum to the skin surface and the resultant bouncing pattern was analyzed by a computer to determine skin firmness.

Wrinkle reduction was assessed visually by the investigator according to the method of Packman. In conjunction with the clinical assessment of facial lines, changes in the visibility of lines and wrinkles were also objectively quantified by taking Siflo™ Replicas of canthus area and analyzing the replicas with a computer image analysis system.

All data were collected at the beginning of the study, after week 2, and after week 4.

## Conclusions:

The study evaluated the clinical efficacy of a base cream with Supplamine™ over a four-week usage period. The results of the laboratory testing in this study suggested that the product tested was **highly effective in improving skin moisturization, skin firmness as well as in reducing fine lines and wrinkles**. When used twice daily, significant improvement in all clinical parameters was observed after two weeks of treatment and much greater improvement was seen after four weeks of treatment.

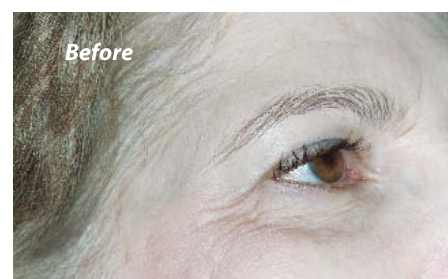
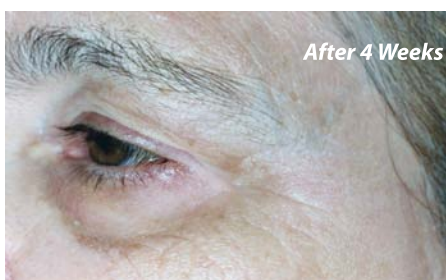
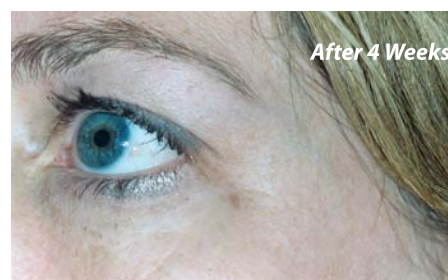
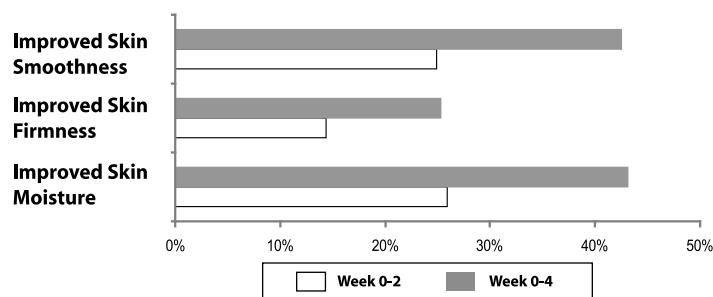
## Results:

### 1. Percentage of Subjects with Improvement from Baseline

Skin smoothness	100%
Skin firmness	100%
Skin moisture	100%

### 2. Average Improvement over Baseline

Dynamis cream with Supplamine™ **increased moisture by 45%, increased appearance of firmness by 25%, and reduces fine lines and wrinkles by 43% in 4 weeks.**



# Four Week Skin Texture Study

Performed by cyberDERM Clinical Studies

## Objective:

This study compared the benefits of a cream containing Supplamine™, Dynamis' active ingredients, to a base cream lacking them.

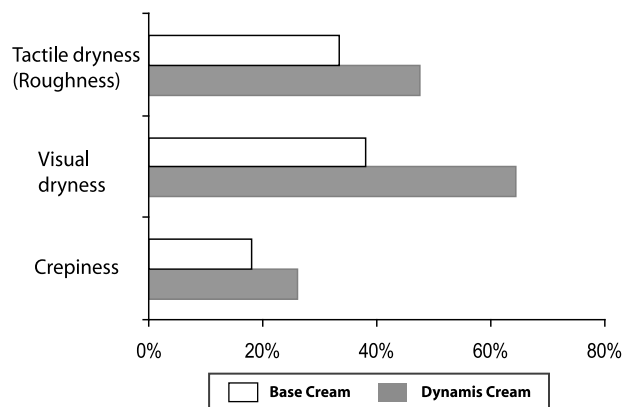
## Study Design:

A base cream and a base cream containing Dynamis' active components were tested in a double blind study for their ability to improve skin smoothness, texture and overall appearance after a four week treatment. Eighteen volunteers with moderate photodamage and dryness on the lateral aspect of the upper arm and volar forearm were treated with twice daily applications of both creams (one for each arm) for four weeks. Expert graders assessed the visual texture (crepiness), visual dryness, and tactile dryness (roughness) of the treated areas at the beginning of the study and after the four week period. Each skin feature was graded on a scale, with 0 being skin that is smooth, firm, resilient, moisturized and 8 being skin that is markedly rough, inflexible, and wrinkled.

## Results:

### 1. Skin Texture Percentage Improvement in Four Weeks

Dynamis cream **reduced crepiness by 26%, visual dryness by 64%, and tactile dryness (roughness) by 48%** in 4 weeks.



### 2. Expert Grader's Ratings of Texture of Crepiness, Visual Dryness, and Tactile Dryness (Roughness)

Skin Feature	Week 0		Week 4		Grade Change		P value
	Base Cream	Dynamis Cream	Base Cream	Dynamis Cream	Base Cream	Dynamis Cream	
Texture of Crepiness	5.0	5.0	4.1	3.7	-0.9	-1.3	0.032
Visual Dryness	2.9	2.8	1.8	1.0	-1.1	-1.8	0.006
Tactile Dryness (Roughness)	3.9	4.0	2.6	2.1	-1.3	-1.9	0.051

The Dynamis Cream was much more effective in **significantly reducing visual dryness** than Base Cream. Tactile dryness was reduced by both formulations but more so with the Dynamis Cream than the Base Cream. These differences are highly directional and are approaching significance at  $p < 0.05$ . The Dynamis Cream was **much more effective in significantly reducing visual texture/crepiness** scores than the Base Cream.

## Conclusions:

We may conclude from this four week study that treatment with either product formulation results in an improved appearance and texture of dry, photodamaged skin. Moreover, based on the Expert Grader results of this study we found product formulation with Dynamis' Supplamine™ to be significantly superior to the base cream.



Dynamis Cream



Base Cream