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Date: 11.07.2014

Efficacy Test Conducted With “Elite Flow Elixir” (Cosmetic Study)

Summary

Study Sponsor : **FLOWTOX Cosmetics GmbH**
Dr.-Kurt-Schumacherstr. 19
90402 Nuremberg
Germany

Date of Order.....: 15.05.2014

Performance of Test: Derma Consult Concept GmbH
and Evaluation by Hermann-Wandersleb-Ring 4
53121 Bonn
Germany

Supervisors of Study: Dr. med. H. Prieur, Dermatologist – Allergist
B. Nissen, Manager Derma Consult Concept

Study Code: DCC14W071

Test Product: The test product, which was coded as follows, was provided to
Derma Consult on behalf of the study sponsor in May 2014:

A. Elite Flow Elixir (Charge: FTEE1505142)

Subjects: Number of individuals.: 30 (+ 1 reserve subject)
Sex.....: female
Age range (completing) ..: 35-65 years (average: 48,2)

Test Area: Inner sides of forearms
Crow’s Feet

Application.....: Duration....: 14 days
Frequency.: twice daily

Test Period: June / July 2014

manager: Boris Nissen
bank account: VR Bank Bonn eG BIC: GENO DE D1 HBO
IBAN: DE38381602206110474014

district court Bonn HRB 12566
VAT-REG.No. DE 209873944
Tax No. 205/5711/0927

Test Parameters: 1. Determination of *skin hydration* with Corneometer MPA 5 CPU (Courage & Khazaka GmbH, Cologne)

2. Determination of *skin firmness and elasticity (biomechanical properties of the skin)* by means of Cutometer MPA 580 (Courage & Khazaka GmbH, Cologne)

3. Determination of *wrinkle depth* by means of PRIMOS® 5.7 high-res (GFMeßtechnik GmbH, Teltow, Germany)

4. Photographic documentation of efficacy in crows' feet region (conducted on 5 selected subjects + 1 reserve subject)

Design of Study: **Day 0** (afternoon / evening visit)

- Determination of the parameters in the test areas
- Initial photographs taken (selected subjects)
- First test product application (under supervision after demonstration of proper use)

Day 1 (morning visit)

- Second test product application (under supervision)
- 30 minutes after application, measurement of skin hydration & wrinkle depth

Day 7 (afternoon / evening visit)

- Determination of the parameters 8-12 hours following the last respective test product application in the morning

Day 14 (afternoon / evening visit)

- Determination of the parameters 8-12 hours following the final test product application in the morning
- Concluding photographs taken (selected subjects)

Evaluation: Descriptive statistics (average, median, minimum, maximum, variance, standard error, standard deviation); Wilcoxon Rank Test

Results : **Skin Hydration**

The test product was found to statistically significantly increase skin hydration.

30 minutes after the second product application, a mean increase by 49% was observed and a positive effect detected in 100% of the volunteers. After 14 days of regular treatment, 8-12 hours after final use, a mean increase by 35% was observed and a positive effect detected in 100% of the volunteers.

Biomechanical Properties of the Skin

The test product was found to statistically significantly enhance the biomechanical properties of the skin towards the firm-elastic optimum.

After 14 days of regular treatment, 8-12 hours after final use, a mean increase by 8% (firmness) / 5% (elasticity) was observed and a positive effect detected in 83% (firmness) / 70% (elasticity) of the volunteers.

Wrinkle Depth

The test product was found to statistically significantly decrease wrinkle depth.

30 minutes after the second product application, a mean decrease by 9% was observed and a positive effect detected in 93% of the volunteers. After 14 days of regular treatment, 8-12 hours after final use, a mean decrease by 5% was observed and a positive effect detected in 83% of the volunteers.

Methods

Measurement of Skin Hydration (Corneometry)

The Corneometer MPA 5 CPU (Courage and Khazaka, Cologne, Germany) registers the electrical capacitance of the skin surface. The capacitance is expressed digitally in arbitrary units (a.u.). The probe head (7x7 mm) consisting of a condenser was applied to the skin surface at constant pressure (3.5 N). The measuring principle is based on distinctly different dielectric constants of water (approximately 81) and most other materials (less than seven). Five measurements were performed on each test area and the mean was used to define the hydration state of the stratum corneum. Corneometer used in this study: S/N 09372310; probe S/N 09341841.

Measurement of Biomechanical Properties (Elasticity, Firmness)

The biomechanical properties of the skin are assessed using the Cutometer MPA580 (Courage + Khazaka Electronic GmbH, Cologne; S/N 32041888 tube: S/N 04317556).

The measurement is based on the vacuum-suction principle. By applying a constant negative pressure for a given time period, skin is drawn into a hollow tube with an orifice of 2 mm in diameter. Then, at normal air pressure, the skin is allowed to retract. The penetration depth of the skin into the tube is recorded optically without friction and without mechanical influence. A number of standardized parameters can be calculated from the resulting penetration depth curve. Most of the parameters are a function of skin thickness and thus cannot be simply compared between subjects and regions.

To increase accuracy and to capture information on the properties of skin under repeated external stress, the cycle is repeated several times and parameters selected for evaluation are based on areas rather than individual measurement points.

The delineation of the areas is based on the fitted logarithmic envelope curves of the minimum and maximum extensions according to the equation:

$$y = \frac{\ln x + b}{a}$$

(x = repetitions, y = max. amplitude or min. amplitude).

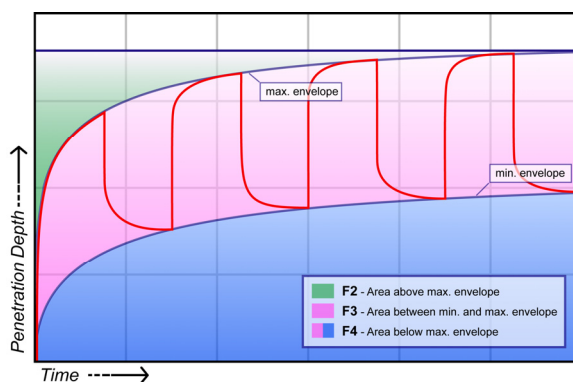


Fig. 1: Cutometer Parameters

The study was conducted with 20 successive measurement cycles, 1 second suction, 1 second retraction, with a 450 mbar vacuum. The following parameters were selected to assess changes in the biomechanical properties of the skin:

Skin firmness

Skin firmness is assessed by the parameter F4, the area below the approximated envelope function of the maximum extensions. → A decrease in F4 corresponds to an increase in skin firmness.

Skin elasticity

Skin elasticity is assessed by the ratio $F3 / F4$. The larger $F3$ in comparison to $F4$, the larger are the restoring forces and the smaller is the remaining residual deformation. → The closer the resulting value is to 1, the more elastic the skin.

The calculation of the parameters was conducted by WinCT (Courage & Khazaka GmbH, Cologne - Germany).

Measurement of Wrinkle Depth

PRIMOS (Phase-Shifting rapid in vivo measurement of skin) is a non-contact measurement device that allows for real-time three-dimensional in vivo measurement of the micro topography of human skin based on the technology of active image triangulation. The measurement head consists of a digital micromirror device as projection unit and a CCD-camera as recording unit, mounted onto an adjustable rack. For active image triangulation an intensity encoded point M is projected onto the surface under investigation. Its image on the surface is recorded by the CCD-camera from a specific angle. The point M is a function of parameters like intensity, triangulation angle between projection system and camera and some other inner respectively outer coordinates of the camera and projection plane. The height information of the structured surface is coded in the distorted intensity pattern, which is recorded. The resolution and accuracy depends on the optical and topographical characteristics of the measured surface and on the noise characteristics of the measurement system. For accurate in vivo measurements of human skin, depending on the measured part of the human body (inner forearm, forehead, eye zone), different parameters of effective wavelength and amplification factor should be used.

To regard the differences of human skin and avoid undesired distortions by movements, the fast phase-shift technique with settings to accurately detect deeper structures (phase width: 16, 64 & 128 pixels) was used for the measurement. For each measurement, a minimum of 3 recordings were made and the clearest image without movement distortions or artefacts was selected for further processing. On follow-up visits, the original captured data was overlaid onto the skin of the volunteers to help in the relocation process of the test area.

At the end of the study, distortions due to body hairs were digitally removed and the macro structure (calculated by polynomial approximation), i.e. the curvature of the entire test area, subtracted to allow a proper analysis of the microstructure, i.e. wrinkles and surface roughness. Wrinkle depth was then assessed by means of the parameter R_{Max} that is defined as the maximum vertical distance from the highest peak to the lowest valley of five segments of equal length. To mitigate locational effects, the evaluation was conducted using the arithmetic average of R_{max} from 50 parallel cuts. System used in this study: PRIMOS compact high-res S/N 108-00041, Software Version 5.7.

Photographic Documentation

A custom digital imaging system is used, controlling subject orientation without visual interference and light conditions (LED constant light source). Photographs are provided as digital files in JPG format (3300*2200 pixels) with minimum compression applied.

Performance of Test

The subjects were selected from the Derma Consult Concept GmbH database. They were informed about importance and meaning of the study; they could withdraw from the study at any time without giving any reason. Written informed consent was obtained from all the subjects prior to entry into the trial. The following criteria were used for selection of subjects:

for inclusion in study:

- female (35-65 years of age)
- visible Crow's Feet
- ability to comply with the requirements of the study
- clinically healthy

for exclusion from study:

- skin diseases or any other medical condition requiring systemic medical treatment or is interfering with the objectives of the study
- planned medical treatment during study period
- pregnancy

A reserve subject in addition to the 30 original subjects, to replace potential drop-outs, started the study with a delay of 2 days (final reading only taken in case a drop-out needed to be replaced). The subjects were instructed not to use any topical preparations on the test areas starting from seven days prior to testing (preconditioning phase) and until the end of the test with exception of the following decorative cosmetics: lipstick/lipliner and mascara/eyeliner and eyeshadow. For cleansing, water or a mild syndet (Eubos[®] flüssig – blau; manufacturer: Dr. Hobein, D-53340 Meckenheim-Merl, Germany) was allowed only (whole study inclusive the preconditioning phase).

On the initial visit to the test institute, after completion of the preconditioning phase, scheduled in the late afternoon / early evening, measurements were taken at clearly defined sites on the inner sides of the forearms (skin hydration, biomechanical properties) and in the Crow's Feet region (wrinkle depth). One area on the inner side of the forearms remained untreated and served as control. The treatment area of approximately 5 x 5cm on the inner sides of the forearms was selected at random and the wrinkle depth measurement was conducted on the side of the face with the most prominent wrinkles – if equal conditions were found the side was selected at random. Subsequently, the initial photographs were taken (centered on the Crow's Feet) on 5 selected subjects and an additional reserve subject (same side selection as for measurement).

After completion of measurement and photographic documentation, application with the supplied syringes was demonstrated to the subjects by a Derma Consult staff member (approx. 0,5ml for facial treatment – ½ syringe - and approx. 0,1ml for treatment in the designated area on the inner sides of the forearms). The subjects then performed the initial application at the test institute under supervision and were asked to return to the test institute the following morning for their second application under supervision and repeated measurement of skin hydration and wrinkle depth 30 minutes after the second application (in the face then, a full syringe had been used). After this second measurement, the subjects were provided with the test product for 2 weeks of twice daily home application (in the morning and evening). Further measuring was performed after 7 and 14 days of regular treatment in the late afternoon / early evening, 8-12 hours following the last respective application before the visit in the morning. On the final visit after 14 days of product use, the concluding photographs of the 5 selected subjects and the reserve subject were taken.

All measurements were conducted after an adaptation time to the controlled environmental conditions of the test institute of 30 minutes (room temperature: 21±1°C, relative humidity: 50±5%).

Biometry

Measurement data is automatically computerised and after validity check and quality assurance stored centrally in a database. Evaluation is conducted using the software NAG[®] Statistical Add-Ins for Excel – NAG Ltd., United Kingdom. The data were analyzed by Wilcoxon Rank Test. The 0.05 level was selected as the point of minimal acceptance of statistical significance.

Results

During the first week of treatment, original subject 20 dropped out of the study due to personal reasons unrelated to the conduct of the study and was replaced by the reserve subject. The data collected on the initial and interim visits from the drop-out was discarded and hence the entire evaluation is based on the complete results from 30 volunteers. The completing subjects of this study were between 35-65 years of age (average: 48,2).

Skin Hydration

Evaluated are changes in the hydration values in the treated area on the inner sides of the forearms in comparison to the changes in the untreated control area. An increase in the measurement value corresponds to an increase in skin hydration. The absolute changes by area and time point are displayed in figure two below.

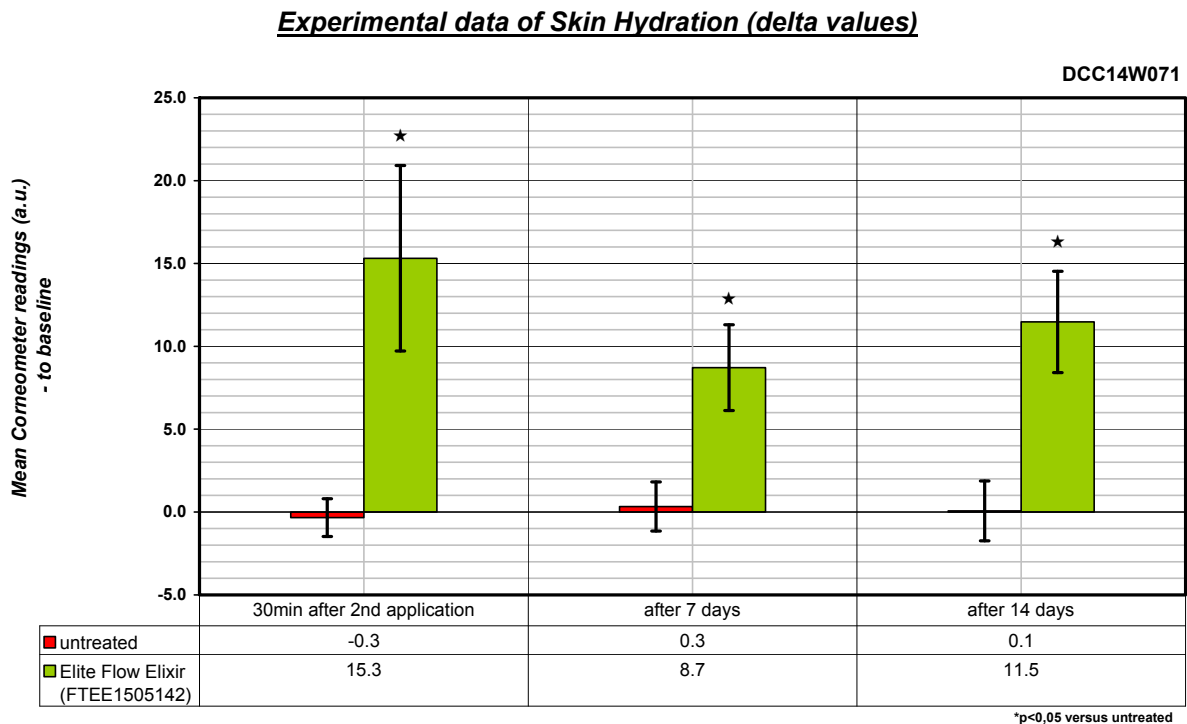


Fig. 2: Δ Skin Hydration Values

30 minutes after the second application and after 7 and 14 days of regular treatment (8-12 hours after last respective use), a statistically significant ($p < 0.05$) increase in skin hydration was observed in the product treated test areas as compared to the changes in the untreated area. The test product was found to increase skin hydration; 30 minutes after the second application and after 14 days of regular treatment, a positive effect could be detected in 100% of the study participants. The respective changes in skin hydration as percentages relative to the initial condition and with consideration of the changes in the untreated area are reported in figure three below.

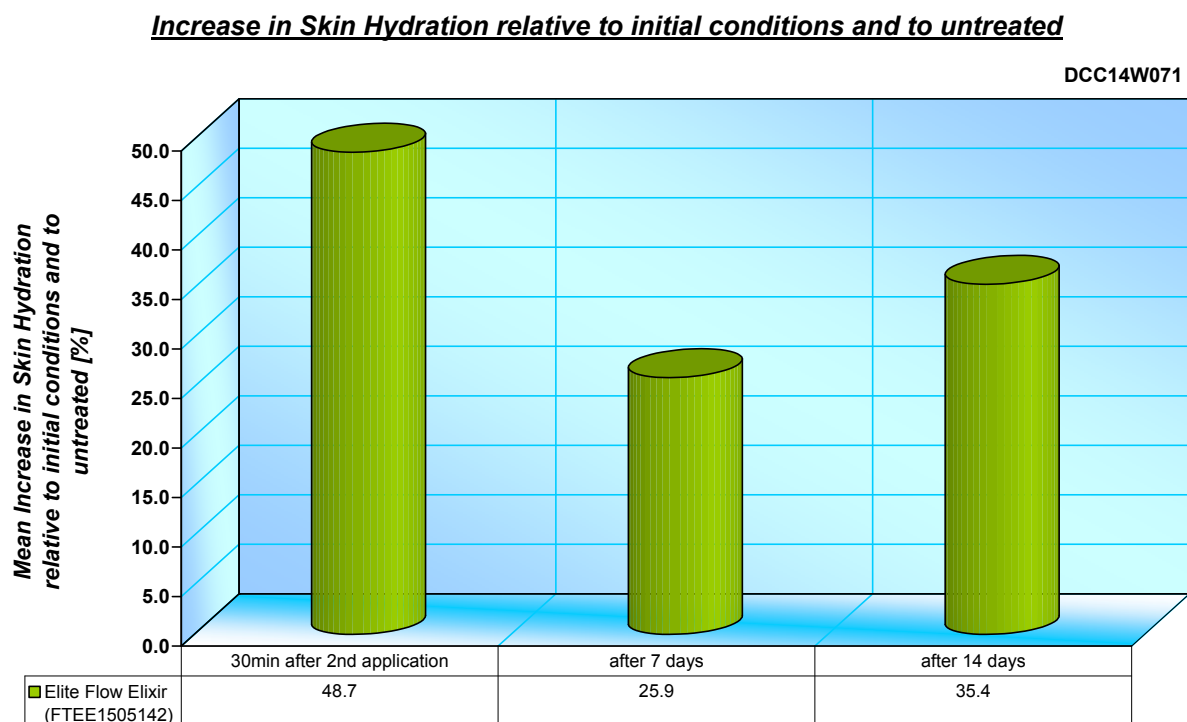


Fig. 3: Increase in Skin Hydration in %

Biomechanical Properties (Skin Firmness / Skin Elasticity)

In assessing skin firmness, evaluated are changes in the parameter F4 in the treated area on the inner sides of the forearms in comparison to the changes in the untreated control area. The absolute changes by area and time point are shown below in figure four. A decrease in F4 corresponds to an increase in skin firmness.

Experimental data of Skin Firmness (delta values)

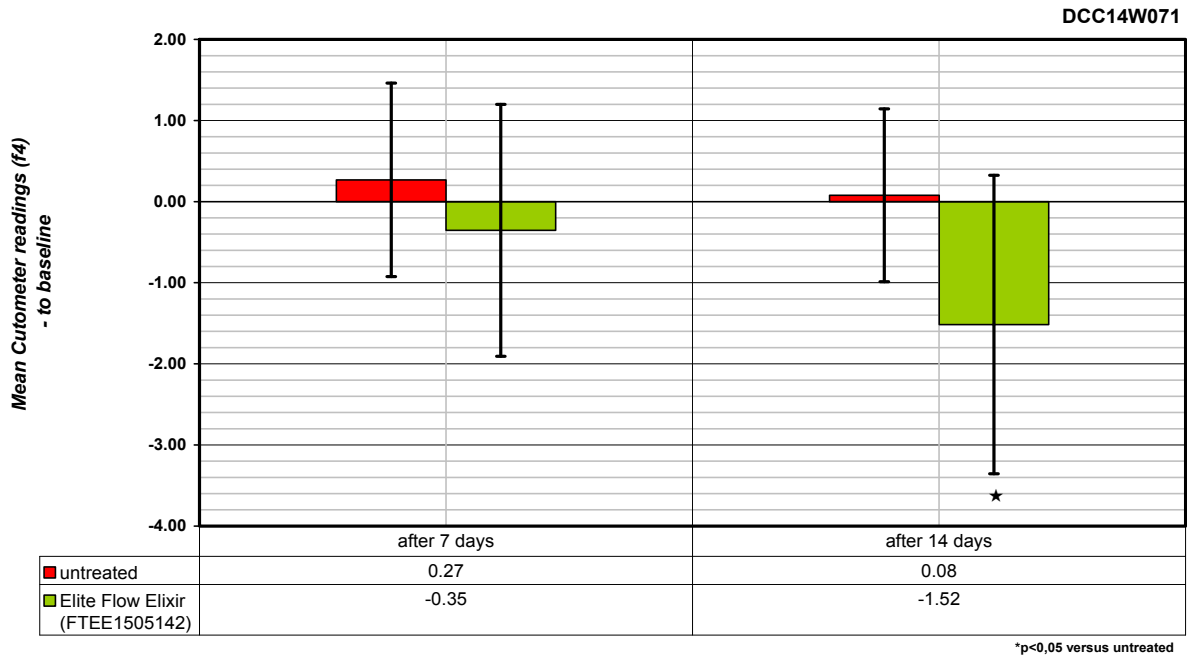


Fig. 4: $\Delta F4$ Values

After 14 days of treatment (8-12 hours after final use), a statistically significant ($p < 0.05$) decrease in F4 was observed in the product treated test area as compared to the changes in the untreated area; the effect after 7 days of regular treatment failed to reach the selected significance criterion. The test product was found to statistically significantly increase skin firmness; after 14 days of regular treatment a positive effect could be detected in 83% of the study participants. The respective percentage changes as compared to the initial condition and with regard of the changes in the untreated area are shown in figure five below.

Increase in Skin Firmness relative to initial conditions and to untreated

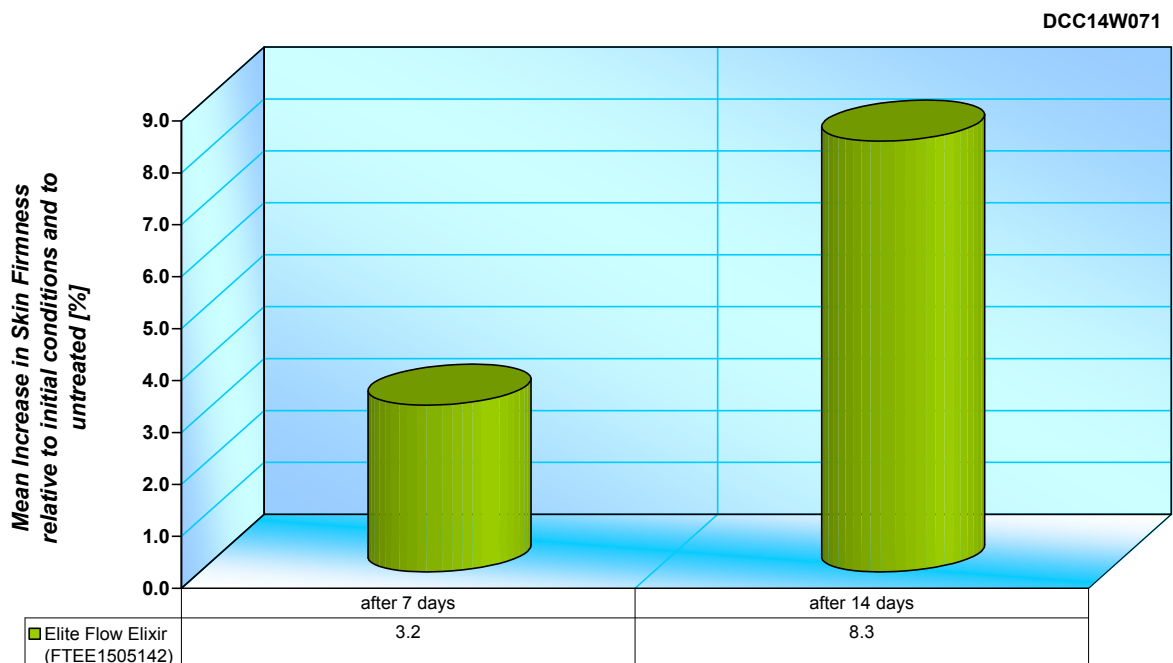


Fig. 5: Increase in Skin Firmness in %

In assessing skin elasticity, evaluated are the changes in the fraction F3 divided by F4 in the treated area on the inner sides of the forearms in comparison to the changes in the untreated control area. The absolute changes by area and time point are shown below in figure six. An increase in F3/F4 corresponds to an increase in skin elasticity.

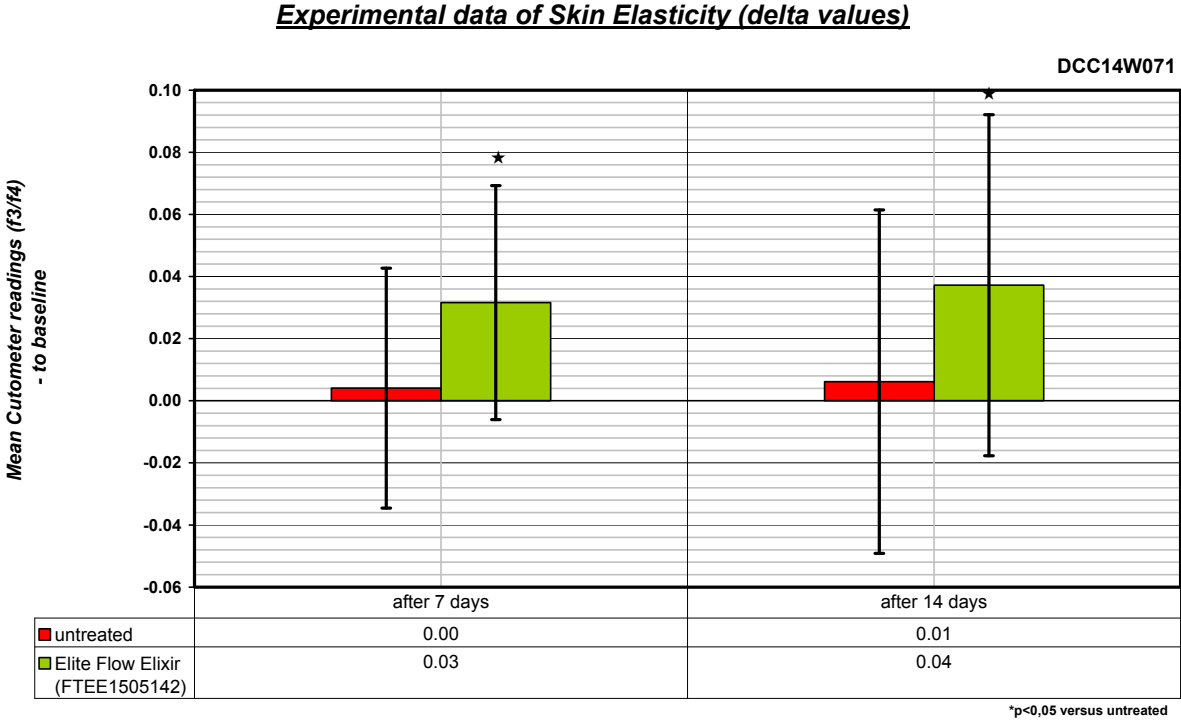


Fig. 6: $\Delta F3/F4$ Values

After both 7 and 14 days of regular treatment (8-12 hours after last respective use), a statistically significant ($p < 0.05$) increase in F3/F4 was observed in the product treated test area as compared to the changes in the untreated area.

The test product was found to statistically significantly increase skin elasticity; after 14 days of treatment a positive effect could be detected in 70% of the study participants. The respective percentage changes as compared to the initial condition and with regard of the changes in the untreated area are shown in figure seven below.

The test product was found not only to increase skin firmness, but at the same time to also increase skin elasticity. Overall, it induced a change in the biomechanical properties of the skin towards the firm-elastic optimum.

Increase in Skin Elasticity relative to initial conditions and to untreated

DCC14W071

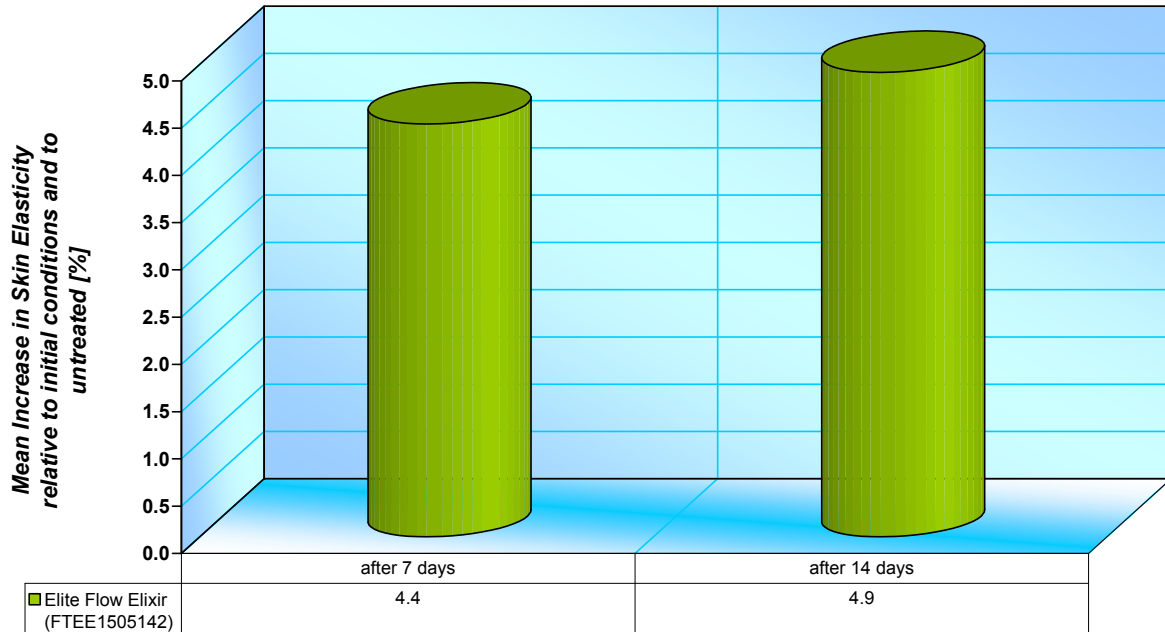


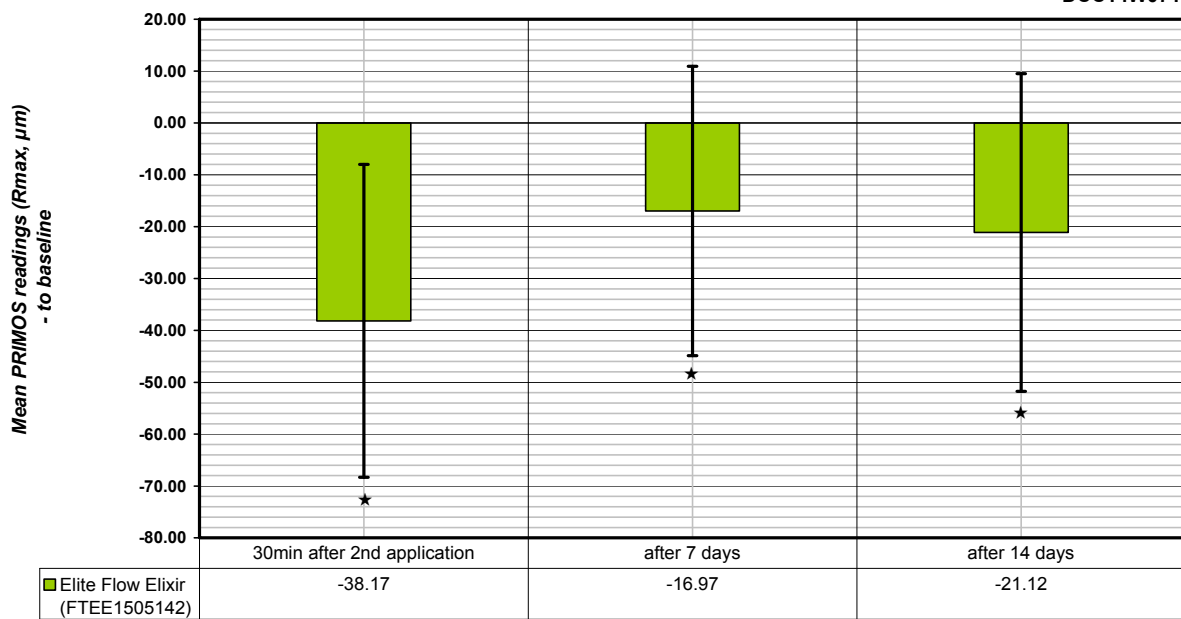
Fig. 7: Increase in Skin Elasticity in %

Wrinkle Depth

Evaluated is the parameter R_{Max} measured on the Crow's Feet in comparison to the initial condition. The absolute changes by time point are shown below in figure eight. A decrease in R_{Max} corresponds to a decrease in wrinkle depth.

Experimental data of Wrinkle Depth (delta values)

DCC14W071



*p<0,05 versus initial condition

Fig. 8: ΔR_{Max} Values

30 minutes after the second application and after 7 and 14 days of regular treatment (8-12 hours after last respective use), a statistically significant ($p < 0.05$) decrease in R_{Max} was observed in the product treated test area as compared to the initial condition.

The test product was found to statistically significantly decrease wrinkle depth; 30 minutes after the second application, a positive effect could be detected in 93% of the study participants; after 14 days in 83%. The respective percentage changes as compared to the initial condition are shown in figure nine below.

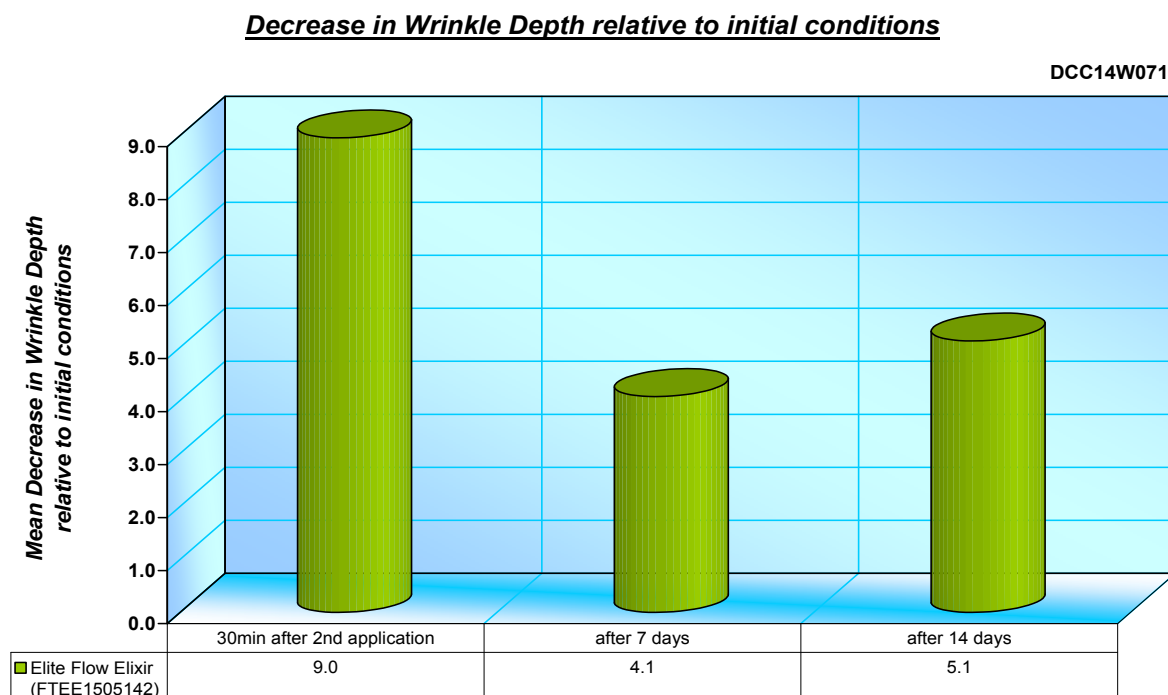


Fig. 9: Decrease in Wrinkle Depth in %

Incompatibility

No incompatibility was observed in or reported by any of the volunteers.

Signature:

B. Nissen
Manager Derma Consult Concept

Signature:

Dr. med. H. Prieur
Dermatologist - Allergist

Enclosures: Measuring values, statistics, summary statistics, graphic representations (including photographs) in print and in digital form on CD

Experimental data of Skin Hydration, DCC14W071

Corneometer readings (a.u.)

	start		30min after 2nd application		after 7 days		after 14 days	
	untr.	A	untr.	A	untr.	A	untr.	A
1	31.7	33.8	33.1	45.9	33.4	41.6	32.3	51.8
2	35.0	35.7	34.3	47.1	33.1	41.9	33.3	46.9
3	34.4	33.3	35.2	55.5	32.9	39.8	32.1	43.5
4	33.2	34.9	30.5	48.9	32.7	39.4	32.0	40.5
5	34.5	34.2	35.6	52.1	37.0	43.1	36.2	47.0
6	32.2	32.1	32.0	53.3	34.5	45.0	30.6	44.7
7	34.1	33.4	31.6	41.3	33.4	41.3	32.7	48.2
8	31.4	32.9	31.6	41.0	34.7	38.9	35.6	40.0
9	31.7	32.1	32.5	49.4	31.7	43.4	32.3	45.6
10	33.7	34.4	34.5	56.9	33.3	41.5	32.7	45.7
11	20.7	21.6	20.3	36.8	22.0	30.0	20.2	32.1
12	34.6	34.9	33.1	50.2	33.0	47.7	33.6	50.1
13	30.8	29.8	29.5	56.6	31.1	42.4	32.4	45.5
14	33.3	34.9	33.8	51.7	33.3	44.6	32.7	46.7
15	34.1	32.0	35.8	49.8	33.3	40.1	33.6	41.9
16	31.3	33.3	30.1	44.4	33.6	41.5	33.2	42.3
17	30.8	32.9	29.5	39.3	30.4	38.2	29.0	39.1
18	29.5	29.8	29.8	42.4	28.7	35.9	29.3	38.6
19	32.2	33.8	32.4	47.9	34.0	39.8	33.0	41.6
20	35.0	33.1	33.1	42.7	33.3	40.9	33.4	40.8
21	33.8	34.6	34.7	52.1	34.8	41.6	34.4	45.2
22	31.9	30.1	30.9	50.0	33.6	40.0	34.8	43.8
23	34.5	32.7	33.3	40.8	34.2	39.5	33.5	43.4
24	33.6	33.5	32.8	47.6	32.2	43.5	31.9	44.6
25	33.9	31.6	33.7	59.6	32.7	45.5	31.3	46.1
26	31.1	31.3	30.4	51.0	33.3	44.6	34.3	47.7
27	35.3	33.8	34.1	51.3	34.4	42.7	34.2	44.0
28	32.9	34.2	31.6	46.9	33.6	44.0	33.6	46.2
29	31.3	33.1	32.3	48.0	32.7	44.4	33.4	47.5
30	24.5	24.8	24.7	31.2	26.0	31.0	27.4	35.3
Average	32.2	32.4	31.9	47.7	32.6	41.1	32.3	43.9
S.D.	3.1	2.9	3.2	6.3	2.8	3.8	2.9	4.2
Median	33.1	33.2	32.5	48.4	33.3	41.5	32.8	44.7

Experimental data of Skin Hydration, DCC14W071

delta Corneometer readings (a.u.)

	30min after 2nd application t1-t0		after 7 days t2-t0		after 14 days t3-t0	
	untr.	A	untr.	A	untr.	A
1	1.4	12.2	1.7	7.9	0.6	18.0
2	-0.8	11.4	-2.0	6.2	-1.7	11.2
3	0.7	22.3	-1.5	6.6	-2.4	10.3
4	-2.7	14.0	-0.5	4.5	-1.2	5.7
5	1.0	17.8	2.5	8.9	1.6	12.8
6	-0.2	21.2	2.3	12.9	-1.6	12.7
7	-2.5	7.9	-0.7	7.9	-1.4	14.8
8	0.2	8.1	3.3	6.0	4.2	7.1
9	0.7	17.3	0.0	11.3	0.5	13.5
10	0.8	22.6	-0.4	7.1	-1.0	11.3
11	-0.4	15.2	1.3	8.3	-0.4	10.5
12	-1.5	15.4	-1.6	12.8	-1.0	15.3
13	-1.3	26.8	0.3	12.6	1.7	15.7
14	0.5	16.7	-0.1	9.7	-0.6	11.8
15	1.7	17.8	-0.7	8.1	-0.4	9.9
16	-1.2	11.0	2.3	8.1	1.9	9.0
17	-1.3	6.5	-0.4	5.3	-1.8	6.2
18	0.3	12.7	-0.8	6.2	-0.2	8.8
19	0.2	14.1	1.8	6.0	0.8	7.9
20	-1.8	9.6	-1.7	7.9	-1.6	7.8
21	0.8	17.4	0.9	6.9	0.5	10.6
22	-1.0	20.0	1.7	9.9	2.9	13.7
23	-1.3	8.2	-0.3	6.8	-1.1	10.7
24	-0.8	14.1	-1.4	10.0	-1.7	11.1
25	-0.2	28.1	-1.2	14.0	-2.6	14.5
26	-0.6	19.7	2.3	13.3	3.2	16.4
27	-1.2	17.4	-0.9	8.8	-1.1	10.1
28	-1.3	12.7	0.7	9.8	0.7	11.9
29	1.0	14.9	1.4	11.3	2.1	14.4
30	0.2	6.4	1.5	6.2	2.9	10.6
Average	-0.3	15.3	0.3	8.7	0.1	11.5
S.D.	1.1	5.6	1.5	2.6	1.8	3.1
Median	-0.3	15.1	-0.1	8.1	-0.4	11.2

Increase in Skin Hydration relative to initial conditions and to untreated, DCC14W071

corrected Corneometer readings (a.u.) [%]

	30min after 2nd application		after 7 days		after 14 days	
	untr.	A	untr.	A	untr.	A
1	4.4	31.6	5.4	17.9	1.8	51.5
2	-2.2	34.2	-5.6	23.0	-4.9	36.3
3	2.1	64.8	-4.5	24.2	-6.9	37.8
4	-8.0	48.3	-1.6	14.7	-3.6	19.8
5	3.0	49.2	7.1	18.9	4.7	32.6
6	-0.7	66.9	7.1	33.2	-5.0	44.5
7	-7.3	30.8	-1.9	25.7	-4.0	48.4
8	0.7	23.9	10.5	7.8	13.3	8.4
9	2.3	51.4	-0.1	35.4	1.7	40.5
10	2.4	63.2	-1.1	21.8	-3.0	35.8
11	-1.7	72.1	6.3	32.3	-2.1	50.5
12	-4.2	48.3	-4.5	41.2	-2.9	46.6
13	-4.2	94.2	1.0	41.1	5.4	47.3
14	1.4	46.5	-0.2	27.9	-1.9	35.6
15	5.1	50.7	-2.2	27.6	-1.3	32.3
16	-3.9	37.0	7.4	17.0	6.0	21.0
17	-4.2	23.9	-1.4	17.7	-5.9	24.7
18	1.1	41.5	-2.8	23.5	-0.6	30.2
19	0.6	41.1	5.6	12.2	2.4	20.9
20	-5.3	34.4	-4.7	28.5	-4.5	28.0
21	2.5	47.8	2.7	17.3	1.6	28.9
22	-3.0	69.5	5.4	27.5	9.2	36.4
23	-3.7	28.6	-0.8	21.6	-3.1	35.9
24	-2.3	44.2	-4.0	33.8	-4.9	38.0
25	-0.5	89.3	-3.6	47.8	-7.7	53.7
26	-2.1	65.0	7.3	35.0	10.4	42.1
27	-3.5	55.0	-2.4	28.5	-3.1	33.0
28	-3.9	40.9	2.2	26.4	2.2	32.6
29	3.3	41.8	4.5	29.8	6.8	36.8
30	0.9	25.0	6.2	19.0	12.0	30.6
Average	-1.0	48.7	1.2	25.9	0.4	35.4
S.D.	3.4	18.0	4.7	9.1	5.8	10.4
Median	-1.2	47.1	-0.2	26.0	-1.6	35.9
Impr.*	-	100	-	100	-	100

* % of subjects with relative improvement in test area as compared to initial condition and corrected by changes in untreated area

Descriptive Statistics of Skin Hydration, DCC14W071

start

	untr.	A
Valid cases	30.0	30.0
Mean	32.2	32.4
Std. error of mean	0.6	0.5
Variance	9.4	8.7
Std. Deviation	3.1	2.9
Variation Coefficient	0.1	0.1
Minimum	20.7	21.6
Maximum	35.3	35.7
Median	33.1	33.2

30min after 2nd application

	untr.	A
Valid cases	30.0	30.0
Mean	31.9	47.7
Std. error of mean	0.6	1.2
Variance	10.0	40.0
Std. Deviation	3.2	6.3
Variation Coefficient	0.1	0.1
Minimum	20.3	31.2
Maximum	35.8	59.6
Median	32.5	48.4

after 7 days

	untr.	A
Valid cases	30.0	30.0
Mean	32.6	41.1
Std. error of mean	0.5	0.7
Variance	7.8	14.5
Std. Deviation	2.8	3.8
Variation Coefficient	0.1	0.1
Minimum	22.0	30.0
Maximum	37.0	47.7
Median	33.3	41.5

after 14 days

	untr.	A
Valid cases	30.0	30.0
Mean	32.3	43.9
Std. error of mean	0.5	0.8
Variance	8.6	17.5
Std. Deviation	2.9	4.2
Variation Coefficient	0.1	0.1
Minimum	20.2	32.1
Maximum	36.2	51.8
Median	32.8	44.7

Wilcoxon Rank Test of Skin Hydration, DCC14W071

start - comparison of absolute values

	untr. - A
Rank sum (positive)	196.5
Z-value	-0.7302
Significance	0.4677
non-zero observations	30

30min after 2nd application - comparison of changes from initial condition

	untr. - A
Rank sum (positive)	0
Z-value	-4.7720
Significance	0.0000
non-zero observations	30

after 7 days - comparison of changes from initial condition

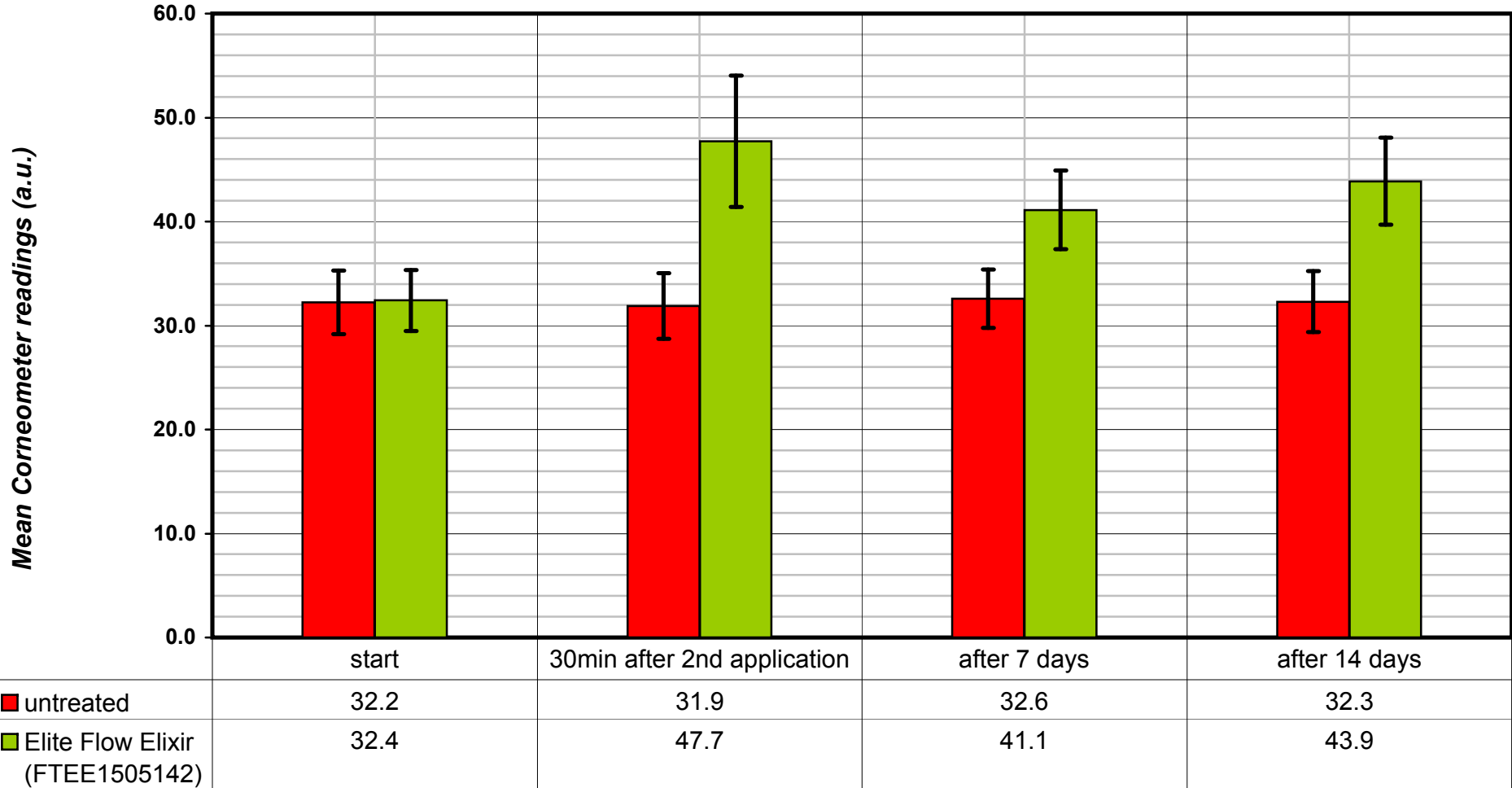
	untr. - A
Rank sum (positive)	0
Z-value	-4.7719
Significance	0.0000
non-zero observations	30

after 14 days - comparison of changes from initial condition

	untr. - A
Rank sum (positive)	0
Z-value	-4.7719
Significance	0.0000
non-zero observations	30

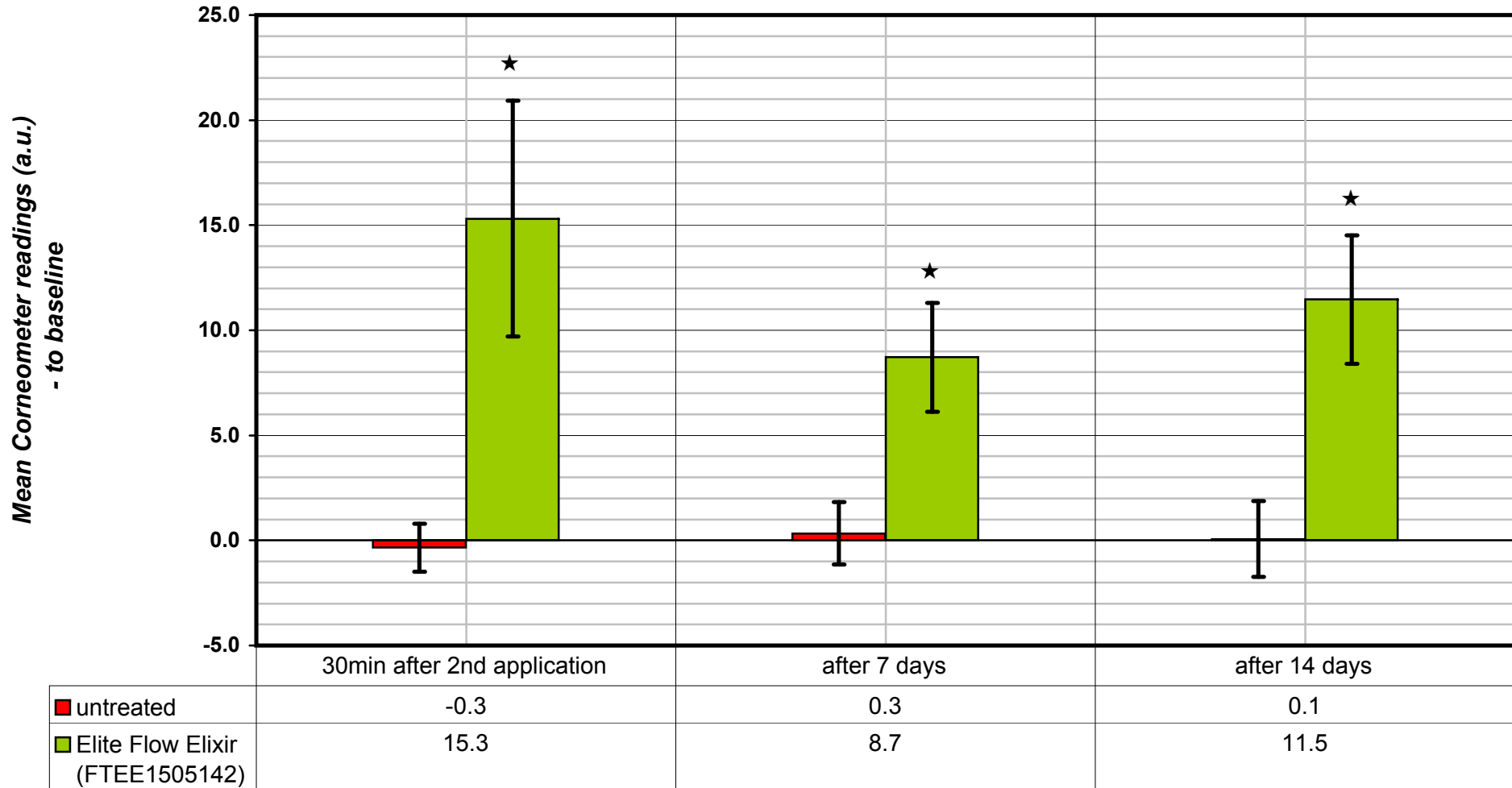
Experimental data of Skin Hydration

DCC14W071



Experimental data of Skin Hydration (delta values)

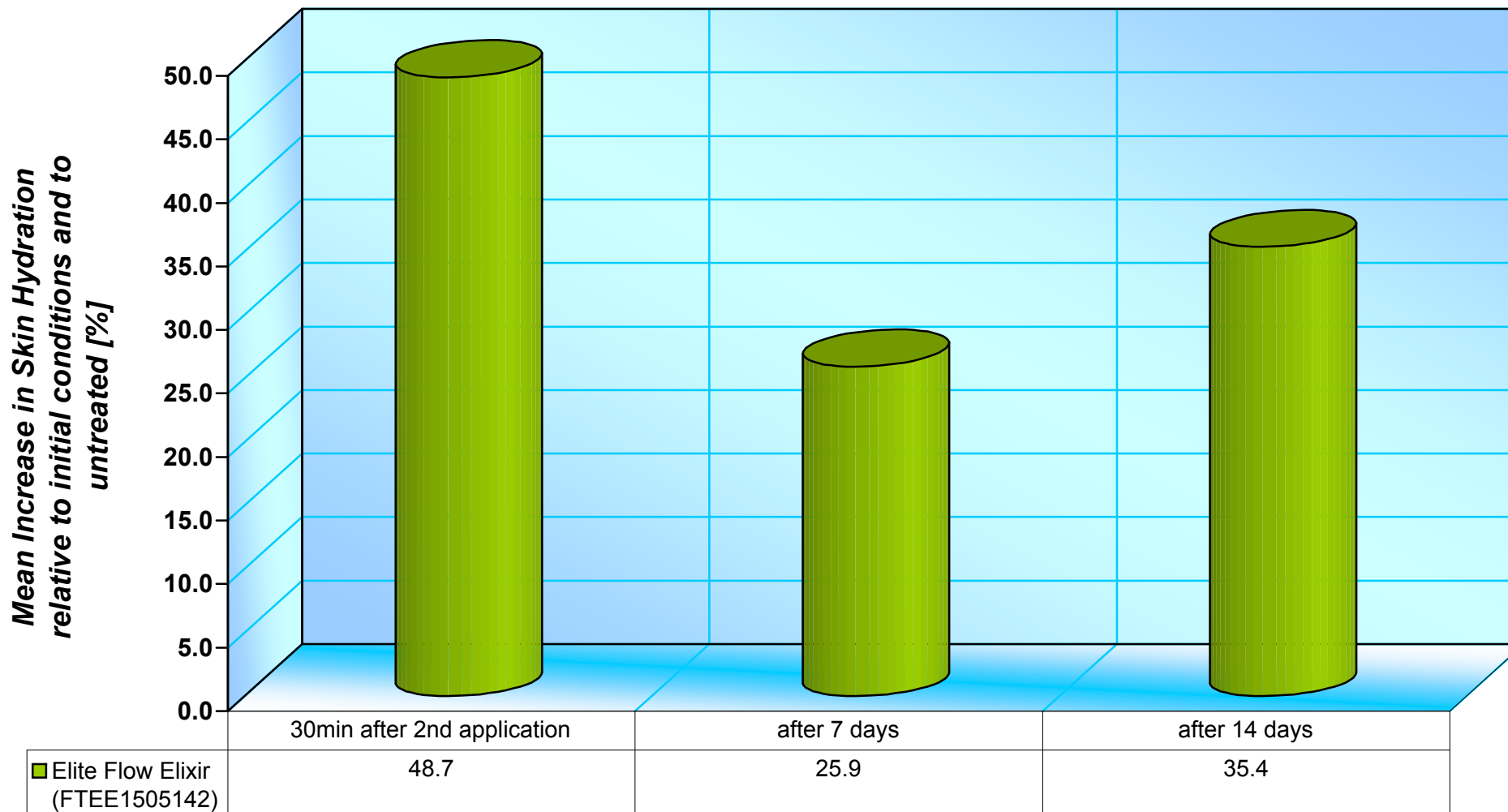
DCC14W071



*p<0,05 versus untreated

Increase in Skin Hydration relative to initial conditions and to untreated

DCC14W071



Experimental data of Skin Firmness, DCC14W071

Cutometer readings (f4)

	start		after 7 days		after 14 days	
	untr.	A	untr.	A	untr.	A
1	20.04	22.04	19.93	19.95	19.40	17.95
2	19.19	19.62	20.85	22.24	20.52	20.15
3	15.16	15.48	15.54	16.02	16.42	15.39
4	16.85	16.76	16.45	15.70	16.36	15.29
5	17.71	18.49	17.98	19.06	17.40	17.76
6	20.62	19.33	20.20	16.75	20.13	14.79
7	20.86	22.72	23.33	22.46	22.08	20.01
8	18.26	17.76	18.99	18.79	16.87	16.06
9	21.84	22.26	22.18	21.25	23.51	18.15
10	18.47	18.05	18.81	16.88	17.92	15.44
11	15.05	16.84	12.86	13.12	14.89	13.32
12	21.90	19.29	20.90	18.84	21.71	16.00
13	20.45	21.23	22.46	18.80	23.00	21.11
14	16.79	18.13	18.39	19.80	16.59	18.59
15	21.27	19.97	22.11	19.41	22.46	19.28
16	19.08	20.03	20.29	19.04	19.20	18.52
17	14.21	14.82	14.79	15.48	13.95	13.48
18	17.42	15.48	17.85	15.02	18.62	15.20
19	16.60	15.78	15.06	14.07	17.78	15.52
20	19.96	19.23	16.99	18.70	19.91	19.62
21	20.57	21.43	20.31	21.10	19.32	18.74
22	15.57	15.02	16.41	16.94	16.02	14.90
23	17.07	19.61	17.23	19.96	17.47	20.67
24	20.22	19.73	20.88	21.15	20.13	20.62
25	21.87	21.29	21.12	17.77	21.43	16.21
26	18.35	18.83	18.64	20.50	17.17	19.79
27	20.66	20.82	20.05	21.38	18.12	17.22
28	17.23	18.20	18.12	17.92	16.47	15.70
29	15.45	15.50	17.23	14.59	15.35	12.45
30	15.25	12.98	16.10	13.42	16.14	13.32
Average	18.47	18.56	18.73	18.20	18.54	17.04
S.D.	2.33	2.50	2.55	2.64	2.53	2.49
Median	18.41	19.03	18.72	18.79	18.02	16.72

Experimental data of Skin Firmness, DCC14W071

delta Cutometer readings (f4)

	after 7 days t2-t0		after 14 days t3-t0	
	untr.	A	untr.	A
1	-0.11	-2.09	-0.64	-4.09
2	1.66	2.62	1.33	0.53
3	0.37	0.54	1.25	-0.09
4	-0.40	-1.06	-0.49	-1.48
5	0.26	0.57	-0.32	-0.73
6	-0.42	-2.58	-0.49	-4.54
7	2.47	-0.25	1.23	-2.70
8	0.72	1.03	-1.39	-1.70
9	0.34	-1.01	1.67	-4.11
10	0.34	-1.17	-0.55	-2.62
11	-2.20	-3.72	-0.16	-3.52
12	-1.00	-0.45	-0.19	-3.30
13	2.01	-2.43	2.55	-0.12
14	1.59	1.67	-0.20	0.46
15	0.84	-0.56	1.19	-0.69
16	1.21	-1.00	0.13	-1.51
17	0.58	0.66	-0.26	-1.34
18	0.43	-0.46	1.20	-0.28
19	-1.53	-1.71	1.18	-0.26
20	-2.97	-0.53	-0.05	0.39
21	-0.26	-0.32	-1.25	-2.69
22	0.84	1.93	0.45	-0.12
23	0.16	0.36	0.40	1.06
24	0.66	1.42	-0.09	0.89
25	-0.75	-3.53	-0.44	-5.08
26	0.29	1.67	-1.18	0.96
27	-0.61	0.55	-2.54	-3.60
28	0.89	-0.29	-0.77	-2.50
29	1.78	-0.91	-0.10	-3.04
30	0.86	0.44	0.89	0.34
Average	0.27	-0.35	0.08	-1.52
S.D.	1.19	1.55	1.07	1.84
Median	0.36	-0.39	-0.13	-1.41

Increase in Skin Firmness relative to initial conditions and to untreated, DCC14W071

corrected Cutometer readings (f4) [%]

	after 7 days		after 14 days	
	untr.	A	untr.	A
1	-0.5	-9.0	-3.2	-15.4
2	8.6	4.7	6.9	-4.2
3	2.5	1.1	8.3	-8.8
4	-2.4	-3.9	-2.9	-5.9
5	1.5	1.6	-1.8	-2.2
6	-2.0	-11.3	-2.4	-21.1
7	11.9	-13.0	5.9	-17.8
8	4.0	1.8	-7.6	-1.9
9	1.5	-6.1	7.6	-26.1
10	1.8	-8.4	-3.0	-11.5
11	-14.6	-7.5	-1.0	-19.8
12	-4.6	2.2	-0.9	-16.2
13	9.8	-21.3	12.4	-13.0
14	9.5	-0.3	-1.2	3.7
15	4.0	-6.8	5.6	-9.0
16	6.4	-11.3	0.7	-8.2
17	4.1	0.4	-1.9	-7.2
18	2.4	-5.5	6.9	-8.7
19	-9.2	-1.6	7.1	-8.8
20	-14.9	12.2	-0.3	2.3
21	-1.3	-0.2	-6.1	-6.5
22	5.4	7.4	2.9	-3.7
23	0.9	0.9	2.3	3.1
24	3.3	3.9	-0.4	4.9
25	-3.4	-13.1	-2.0	-21.9
26	1.6	7.3	-6.4	11.6
27	-2.9	5.6	-12.3	-5.0
28	5.2	-6.7	-4.4	-9.3
29	11.5	-17.3	-0.6	-19.0
30	5.6	-2.2	5.9	-3.3
Average	1.5	-3.2	0.5	-8.3
S.D.	6.6	7.8	5.5	8.8
Median	2.1	-1.9	-0.8	-8.5
Impr.*	-	60	-	83

* % of subjects with relative improvement in test area as compared to initial condition and corrected by changes in untreated area

Descriptive Statistics of Skin Firmness, DCC14W071

start

	untr.	A
Valid cases	30.0	30.0
Mean	18.5	18.6
Std. error of mean	0.4	0.5
Variance	5.4	6.3
Std. Deviation	2.3	2.5
Variation Coefficient	0.1	0.1
Minimum	14.2	13.0
Maximum	21.9	22.7
Median	18.4	19.0

after 7 days

	untr.	A
Valid cases	30.0	30.0
Mean	18.7	18.2
Std. error of mean	0.5	0.5
Variance	6.5	7.0
Std. Deviation	2.6	2.6
Variation Coefficient	0.1	0.1
Minimum	12.9	13.1
Maximum	23.3	22.5
Median	18.7	18.8

after 14 days

	untr.	A
Valid cases	30.0	30.0
Mean	18.5	17.0
Std. error of mean	0.5	0.5
Variance	6.4	6.2
Std. Deviation	2.5	2.5
Variation Coefficient	0.1	0.1
Minimum	13.9	12.5
Maximum	23.5	21.1
Median	18.0	16.7

Wilcoxon Rank Test of Skin Firmness, DCC14W071

start - comparison of absolute values

	untr. - A
Rank sum (positive)	207
Z-value	-0.5142
Significance	0.6120
non-zero observations	30

after 7 days - comparison of changes from initial condition

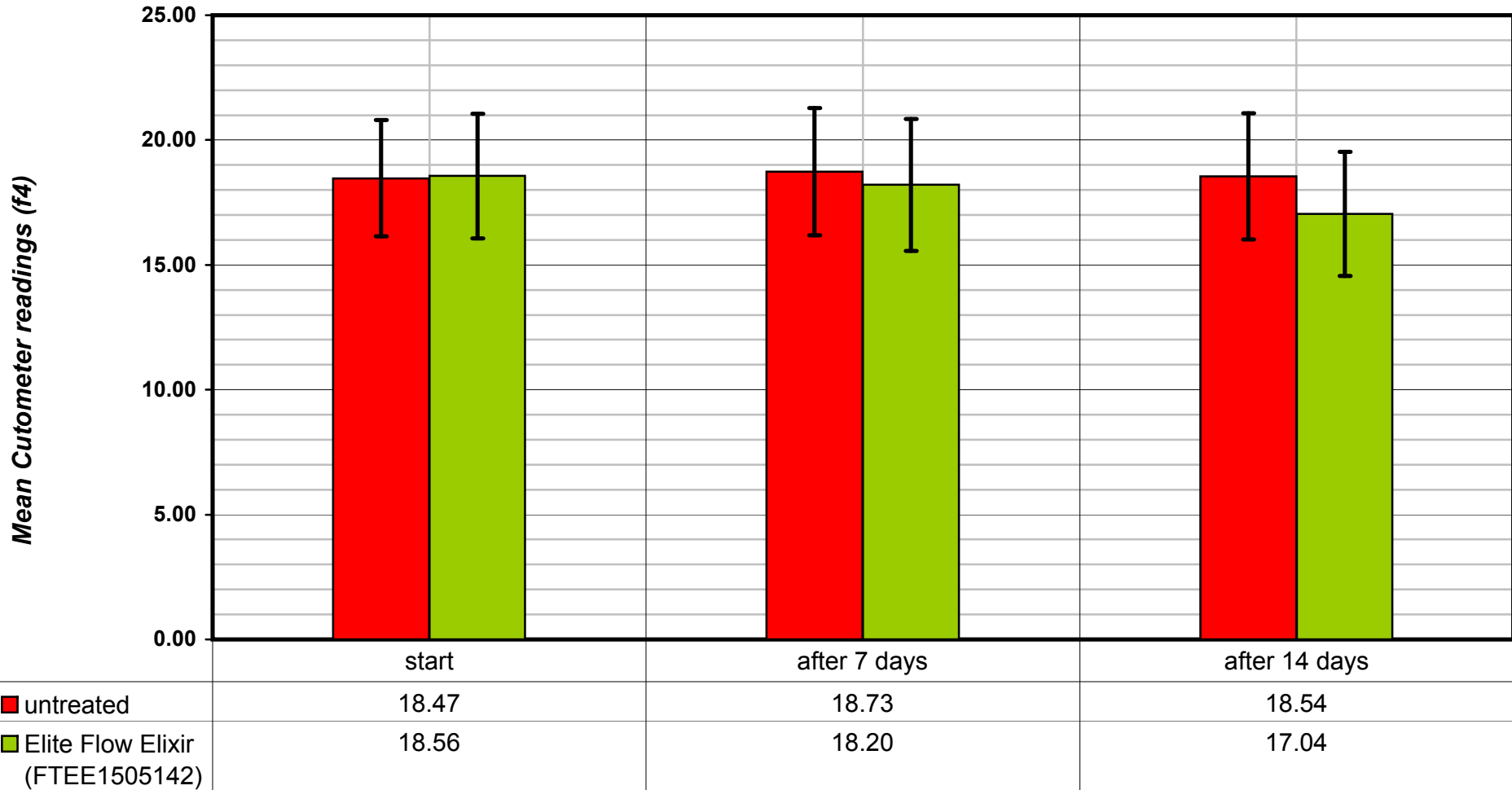
	untr. - A
Rank sum (positive)	323
Z-value	1.8512
Significance	0.0636
non-zero observations	30

after 14 days - comparison of changes from initial condition

	untr. - A
Rank sum (positive)	419
Z-value	3.8257
Significance	0.0000
non-zero observations	30

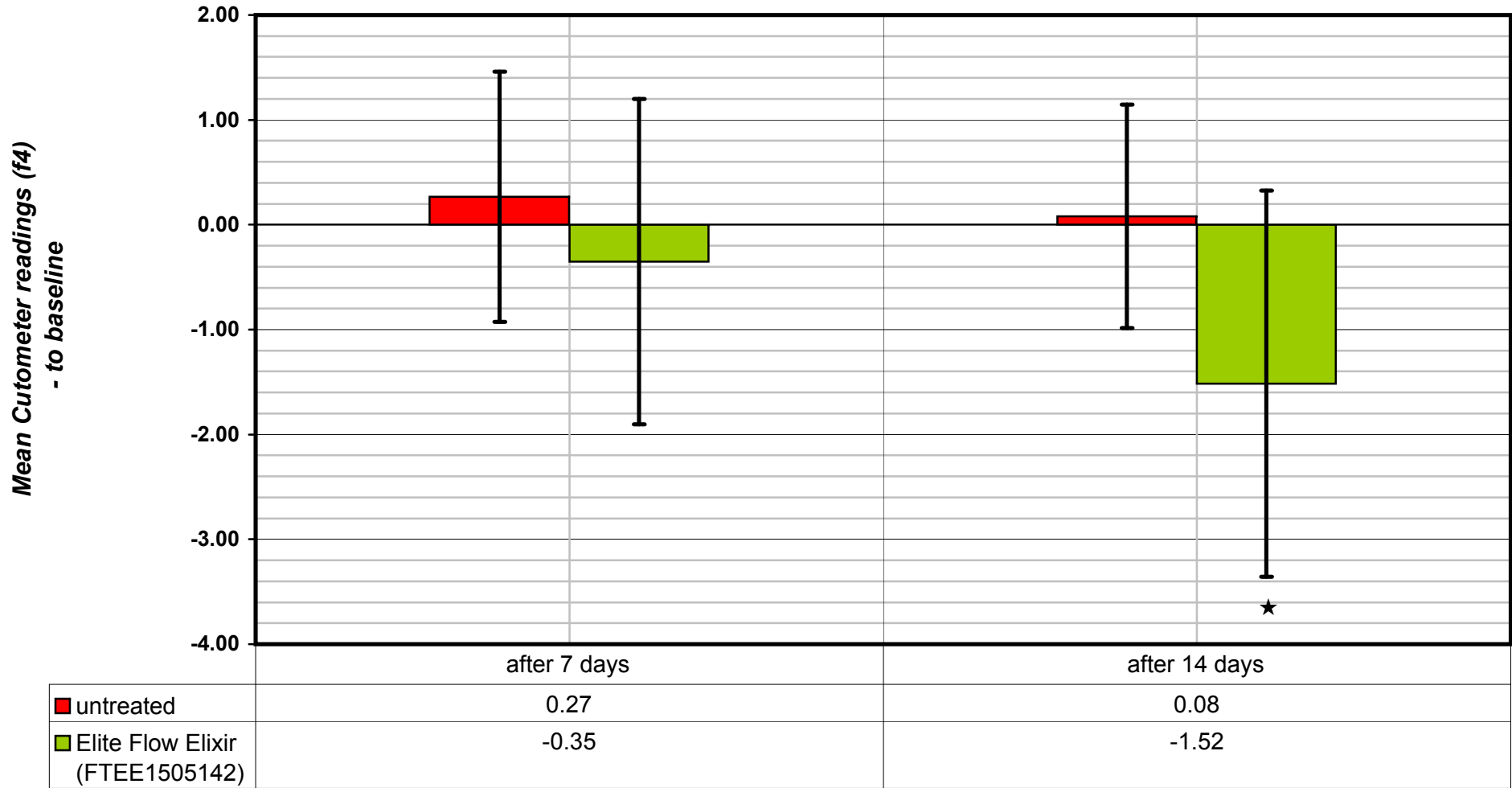
Experimental data of Skin Firmness

DCC14W071



Experimental data of Skin Firmness (delta values)

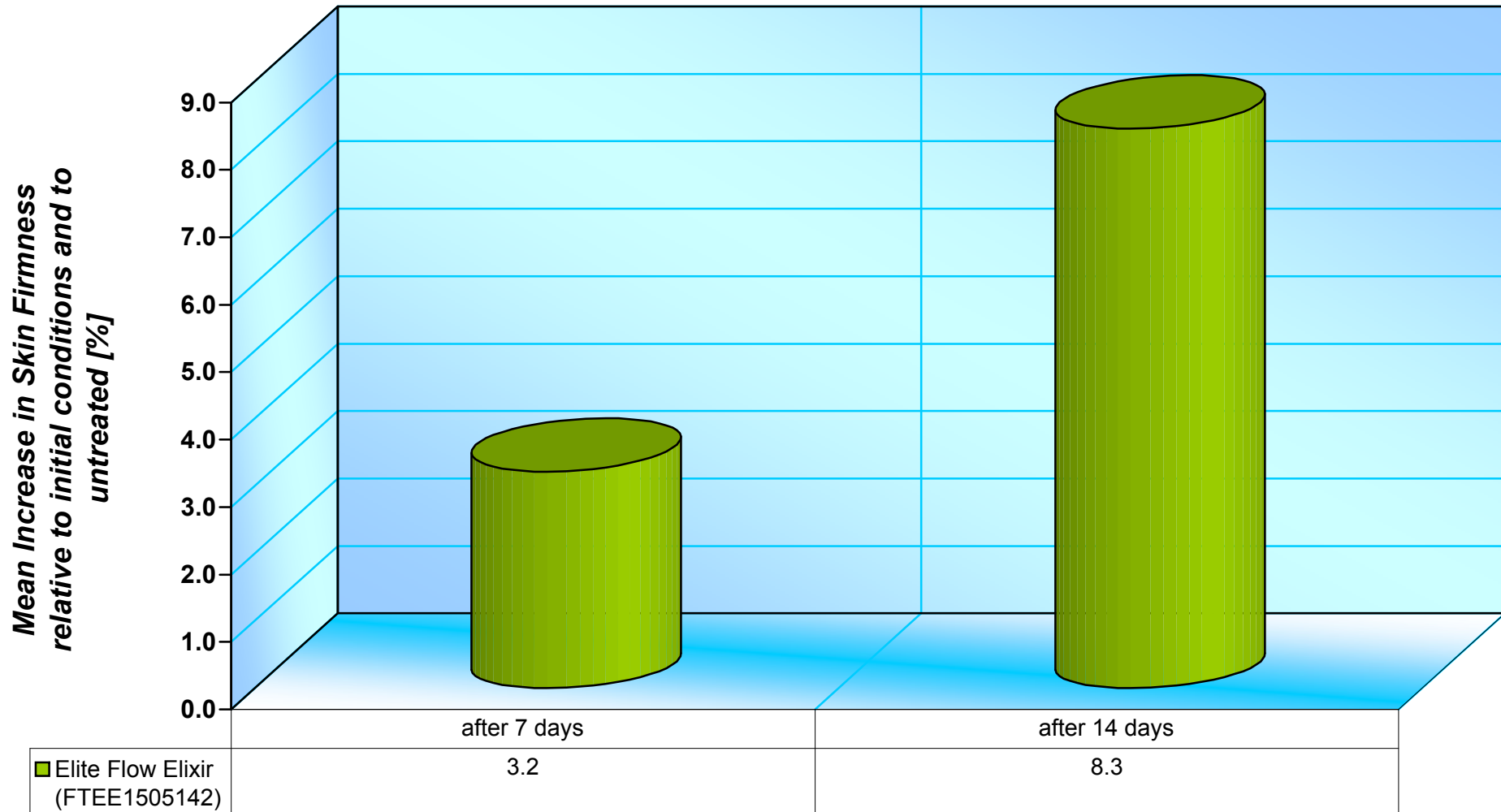
DCC14W071



*p<0,05 versus untreated

Increase in Skin Firmness relative to initial conditions and to untreated

DCC14W071



Experimental data of Skin Elasticity, DCC14W071

Cutometer readings (f3/f4)

	start		after 7 days		after 14 days	
	untr.	A	untr.	A	untr.	A
1	0.52	0.55	0.57	0.61	0.57	0.65
2	0.58	0.57	0.55	0.56	0.65	0.66
3	0.38	0.43	0.44	0.48	0.41	0.44
4	0.83	0.82	0.78	0.83	0.76	0.75
5	0.71	0.64	0.71	0.66	0.67	0.65
6	0.68	0.58	0.66	0.64	0.67	0.62
7	0.51	0.55	0.55	0.56	0.56	0.66
8	0.64	0.62	0.65	0.67	0.69	0.64
9	0.48	0.45	0.50	0.48	0.51	0.48
10	0.59	0.63	0.61	0.61	0.50	0.52
11	0.65	0.74	0.57	0.75	0.62	0.84
12	0.78	0.72	0.71	0.75	0.70	0.80
13	0.50	0.56	0.53	0.61	0.58	0.66
14	0.64	0.62	0.63	0.68	0.73	0.73
15	0.60	0.60	0.61	0.59	0.63	0.65
16	0.68	0.67	0.67	0.65	0.71	0.66
17	0.74	0.67	0.75	0.76	0.65	0.69
18	0.76	0.74	0.74	0.74	0.72	0.73
19	0.72	0.76	0.75	0.75	0.75	0.74
20	0.54	0.56	0.59	0.61	0.60	0.59
21	0.62	0.59	0.62	0.65	0.59	0.68
22	0.86	0.82	0.84	0.83	0.87	0.84
23	0.69	0.69	0.66	0.71	0.68	0.72
24	0.51	0.50	0.52	0.61	0.51	0.58
25	0.68	0.60	0.67	0.66	0.71	0.64
26	0.69	0.70	0.64	0.66	0.65	0.67
27	0.52	0.51	0.51	0.61	0.48	0.59
28	0.63	0.68	0.68	0.68	0.71	0.71
29	0.68	0.73	0.75	0.75	0.61	0.70
30	0.68	0.63	0.75	0.71	0.77	0.72
Average	0.64	0.63	0.64	0.66	0.64	0.67
S.D.	0.11	0.10	0.10	0.09	0.10	0.09
Median	0.64	0.63	0.64	0.66	0.65	0.66

Experimental data of Skin Elasticity, DCC14W071

delta Cutometer readings (f3/f4)

	after 7 days t2-t0		after 14 days t3-t0	
	untr.	A	untr.	A
1	0.05	0.06	0.05	0.09
2	-0.03	-0.01	0.07	0.09
3	0.06	0.05	0.04	0.01
4	-0.05	0.01	-0.07	-0.07
5	0.00	0.02	-0.05	0.01
6	-0.02	0.06	-0.01	0.04
7	0.04	0.01	0.05	0.11
8	0.01	0.05	0.06	0.02
9	0.03	0.04	0.04	0.03
10	0.02	-0.03	-0.08	-0.11
11	-0.08	0.02	-0.03	0.10
12	-0.07	0.04	-0.08	0.08
13	0.02	0.05	0.08	0.10
14	0.00	0.06	0.09	0.11
15	0.01	0.00	0.03	0.05
16	-0.02	-0.01	0.03	0.00
17	0.00	0.09	-0.09	0.03
18	-0.02	0.01	-0.04	0.00
19	0.02	-0.01	0.03	-0.02
20	0.05	0.05	0.06	0.03
21	0.00	0.06	-0.03	0.09
22	-0.02	0.00	0.01	0.02
23	-0.03	0.01	-0.01	0.03
24	0.01	0.11	0.00	0.08
25	0.00	0.06	0.03	0.04
26	-0.05	-0.04	-0.04	-0.02
27	-0.01	0.10	-0.04	0.08
28	0.05	0.00	0.08	0.04
29	0.07	0.02	-0.06	-0.03
30	0.07	0.08	0.09	0.09
Average	0.00	0.03	0.01	0.04
S.D.	0.04	0.04	0.06	0.05
Median	0.00	0.03	0.02	0.03

Increase in Skin Elasticity relative to initial conditions and to untreated, DCC14W071

corrected Cutometer readings (f3/f4) [%]

	after 7 days		after 14 days	
	untr.	A	untr.	A
1	9.3	0.8	9.3	7.8
2	-5.6	3.5	12.7	3.2
3	15.6	-4.5	9.7	-6.7
4	-5.8	6.8	-8.7	-0.1
5	-0.2	2.8	-6.5	8.3
6	-2.7	13.0	-1.3	8.7
7	7.6	-5.8	9.0	10.9
8	2.0	5.3	9.0	-5.6
9	5.5	2.8	7.5	-1.0
10	3.6	-7.5	-14.2	-3.4
11	-11.6	14.1	-4.4	18.4
12	-9.2	14.6	-9.7	20.7
13	4.6	5.2	15.1	3.4
14	-0.7	10.1	14.0	3.9
15	1.5	-2.2	5.5	2.7
16	-2.6	0.5	3.8	-4.1
17	0.6	12.6	-12.7	16.8
18	-2.1	3.3	-5.2	4.6
19	3.4	-4.3	4.2	-6.4
20	9.0	-0.2	10.5	-5.4
21	-0.6	11.4	-5.5	20.7
22	-2.1	2.7	1.6	0.9
23	-4.0	5.6	-0.9	5.0
24	1.8	20.9	-0.1	15.9
25	-0.3	10.2	4.5	2.8
26	-7.5	1.8	-6.1	2.8
27	-1.3	20.5	-7.5	23.3
28	7.4	-7.1	11.9	-6.4
29	10.8	-8.3	-9.1	4.7
30	10.3	2.6	13.1	1.2
Average	1.2	4.4	1.6	4.9
S.D.	6.4	7.9	8.8	8.8
Median	0.2	3.1	2.7	3.3
Impr.*	-	73	-	70

* % of subjects with relative improvement in test area as compared to initial condition and corrected by changes in untreated area

Descriptive Statistics of Skin Elasticity, DCC14W071

start

	untr.	A
Valid cases	30.0	30.0
Mean	0.6	0.6
Std. error of mean	0.0	0.0
Variance	0.0	0.0
Std. Deviation	0.1	0.1
Variation Coefficient	0.2	0.2
Minimum	0.4	0.4
Maximum	0.9	0.8
Median	0.6	0.6

after 7 days

	untr.	A
Valid cases	30.0	30.0
Mean	0.6	0.7
Std. error of mean	0.0	0.0
Variance	0.0	0.0
Std. Deviation	0.1	0.1
Variation Coefficient	0.2	0.1
Minimum	0.4	0.5
Maximum	0.8	0.8
Median	0.6	0.7

after 14 days

	untr.	A
Valid cases	30.0	30.0
Mean	0.6	0.7
Std. error of mean	0.0	0.0
Variance	0.0	0.0
Std. Deviation	0.1	0.1
Variation Coefficient	0.2	0.1
Minimum	0.4	0.4
Maximum	0.9	0.8
Median	0.7	0.7

Wilcoxon Rank Test of Skin Elasticity, DCC14W071

start - comparison of absolute values

	untr. - A
Rank sum (positive)	266
Z-value	0.6788
Significance	0.5028
non-zero observations	30

after 7 days - comparison of changes from initial condition

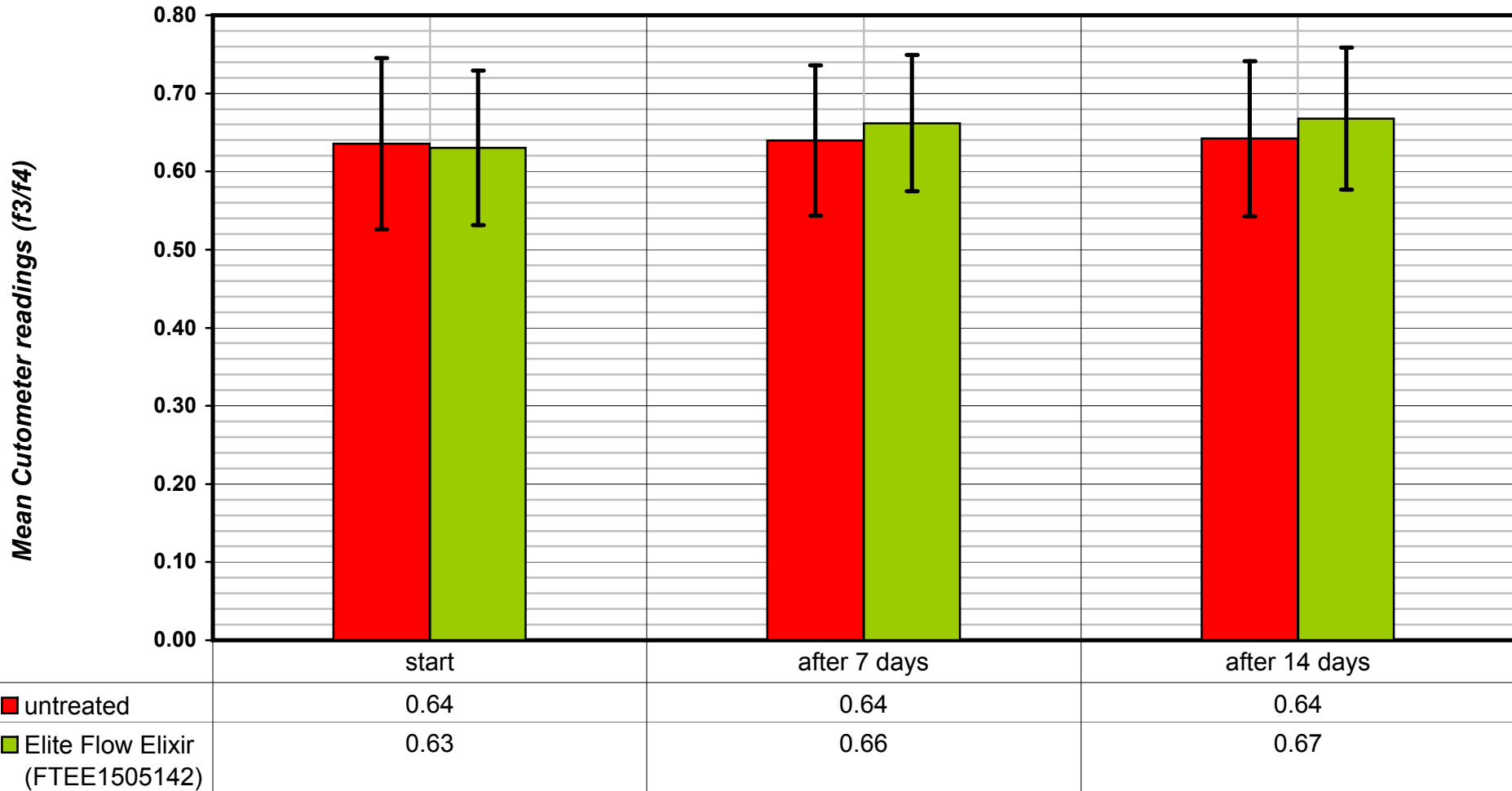
	untr. - A
Rank sum (positive)	98
Z-value	-2.7562
Significance	0.0047
non-zero observations	30

after 14 days - comparison of changes from initial condition

	untr. - A
Rank sum (positive)	110
Z-value	-2.5093
Significance	0.0106
non-zero observations	30

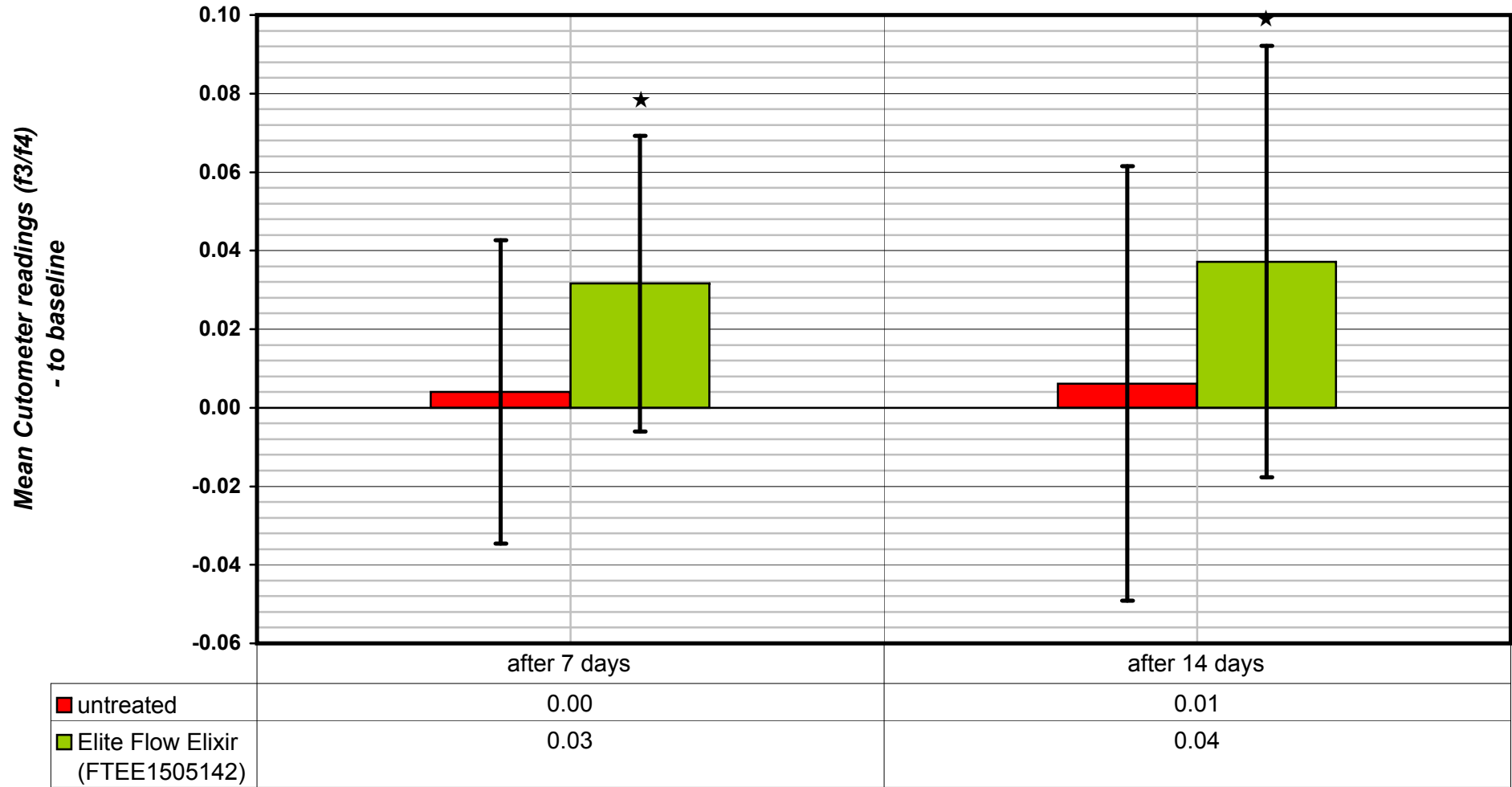
Experimental data of Skin Elasticity

DCC14W071



Experimental data of Skin Elasticity (delta values)

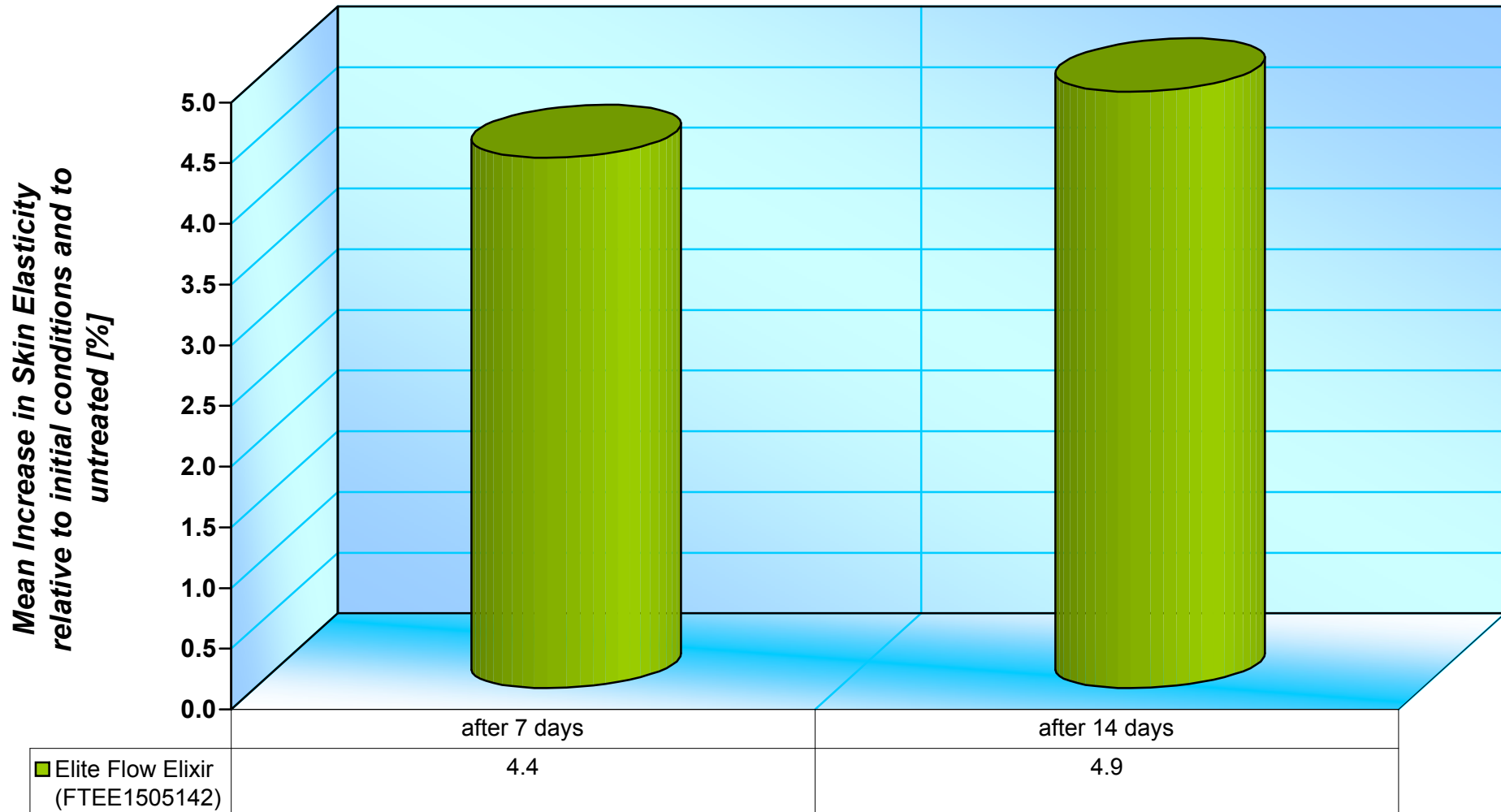
DCC14W071



*p<0,05 versus untreated

Increase in Skin Elasticity relative to initial conditions and to untreated

DCC14W071



Experimental data of Wrinkle Depth, DCC14W071PRIMOS readings (Rmax, μm)

	start	30min after 2nd application	after 7 days	after 14 days
	A	A	A	A
1	429.24	413.08	421.26	403.54
2	334.52	285.90	299.26	304.20
3	328.80	285.16	308.08	319.38
4	333.24	299.26	296.72	306.92
5	294.14	328.88	330.48	349.12
6	405.28	360.46	388.96	379.00
7	474.06	471.24	459.62	468.26
8	407.12	329.36	372.02	356.94
9	334.74	312.42	312.64	323.48
10	604.12	561.40	599.22	632.66
11	648.36	562.14	614.12	589.38
12	421.72	363.62	378.92	355.80
13	415.20	359.18	448.24	429.58
14	392.46	362.78	380.72	368.12
15	488.64	413.44	430.68	419.22
16	360.78	381.86	374.40	346.68
17	308.04	286.54	293.02	287.26
18	383.90	341.34	351.78	378.86
19	367.86	326.68	333.02	325.34
20	556.86	530.26	566.54	607.60
21	411.54	408.62	433.36	421.50
22	318.78	265.38	309.54	284.92
23	669.18	604.60	652.90	644.62
24	424.50	398.88	466.36	405.20
25	428.42	323.44	352.80	373.50
26	320.54	301.22	313.34	303.90
27	463.28	417.22	410.80	422.12
28	433.74	423.64	423.26	418.04
29	380.76	313.04	329.82	338.58
30	417.86	381.44	396.78	360.26
Average	418.59	380.42	401.62	397.47
S.D.	95.76	89.00	97.52	99.67
Median	409.33	361.62	379.82	370.81

Experimental data of Wrinkle Depth, DCC14W071delta PRIMOS readings (Rmax, μm)

	30min after 2nd application t1-t0	after 7 days t2-t0	after 14 days t3-t0
	A	A	A
1	-16.16	-7.98	-25.70
2	-48.62	-35.26	-30.32
3	-43.64	-20.72	-9.42
4	-33.98	-36.52	-26.32
5	34.74	36.34	54.98
6	-44.82	-16.32	-26.28
7	-2.82	-14.44	-5.80
8	-77.76	-35.10	-50.18
9	-22.32	-22.10	-11.26
10	-42.72	-4.90	28.54
11	-86.22	-34.24	-58.98
12	-58.10	-42.80	-65.92
13	-56.02	33.04	14.38
14	-29.68	-11.74	-24.34
15	-75.20	-57.96	-69.42
16	21.08	13.62	-14.10
17	-21.50	-15.02	-20.78
18	-42.56	-32.12	-5.04
19	-41.18	-34.84	-42.52
20	-26.60	9.68	50.74
21	-2.92	21.82	9.96
22	-53.40	-9.24	-33.86
23	-64.58	-16.28	-24.56
24	-25.62	41.86	-19.30
25	-104.98	-75.62	-54.92
26	-19.32	-7.20	-16.64
27	-46.06	-52.48	-41.16
28	-10.10	-10.48	-15.70
29	-67.72	-50.94	-42.18
30	-36.42	-21.08	-57.60
Average	-38.17	-16.97	-21.12
S.D.	30.16	27.90	30.63
Median	-41.87	-16.30	-24.45

Decrease in Wrinkle Depth relative to initial conditions, DCC14W071corrected PRIMOS readings (Rmax, μm) [%]

	30min after 2nd application	after 7 days	after 14 days
	A	A	A
1	-3.8	-1.9	-6.0
2	-14.5	-10.5	-9.1
3	-13.3	-6.3	-2.9
4	-10.2	-11.0	-7.9
5	11.8	12.4	18.7
6	-11.1	-4.0	-6.5
7	-0.6	-3.0	-1.2
8	-19.1	-8.6	-12.3
9	-6.7	-6.6	-3.4
10	-7.1	-0.8	4.7
11	-13.3	-5.3	-9.1
12	-13.8	-10.1	-15.6
13	-13.5	8.0	3.5
14	-7.6	-3.0	-6.2
15	-15.4	-11.9	-14.2
16	5.8	3.8	-3.9
17	-7.0	-4.9	-6.7
18	-11.1	-8.4	-1.3
19	-11.2	-9.5	-11.6
20	-4.8	1.7	9.1
21	-0.7	5.3	2.4
22	-16.8	-2.9	-10.6
23	-9.7	-2.4	-3.7
24	-6.0	9.9	-4.5
25	-24.5	-17.7	-12.8
26	-6.0	-2.2	-5.2
27	-9.9	-11.3	-8.9
28	-2.3	-2.4	-3.6
29	-17.8	-13.4	-11.1
30	-8.7	-5.0	-13.8
Average	-9.0	-4.1	-5.1
S.D.	7.3	7.0	7.4
Median	-9.8	-4.5	-6.1
Impr.*	93	80	83

* % of subjects with relative improvement in test area as compared to initial condition

Descriptive Statistics of Wrinkle Depth, DCC14W071

start

A	
Valid cases	30.0
Mean	418.6
Std. error of mean	17.5
Variance	9170.0
Std. Deviation	95.8
Variation Coefficient	0.2
Minimum	294.1
Maximum	669.2
Median	409.3

30min after 2nd application

A	
Valid cases	30.0
Mean	380.4
Std. error of mean	16.2
Variance	7920.7
Std. Deviation	89.0
Variation Coefficient	0.2
Minimum	265.4
Maximum	604.6
Median	361.6

after 7 days

A	
Valid cases	30.0
Mean	401.6
Std. error of mean	17.8
Variance	9511.0
Std. Deviation	97.5
Variation Coefficient	0.2
Minimum	293.0
Maximum	652.9
Median	379.8

after 14 days

A	
Valid cases	30.0
Mean	397.5
Std. error of mean	18.2
Variance	9935.1
Std. Deviation	99.7
Variation Coefficient	0.3
Minimum	284.9
Maximum	644.6
Median	370.8

Wilcoxon Rank Test of Wrinkle Depth, DCC14W071

start - 30min after 2nd application

	A
Rank sum (positive)	446
Z-value	4.3811
Significance	0.0000
non-zero observations	30

start - after 7 days

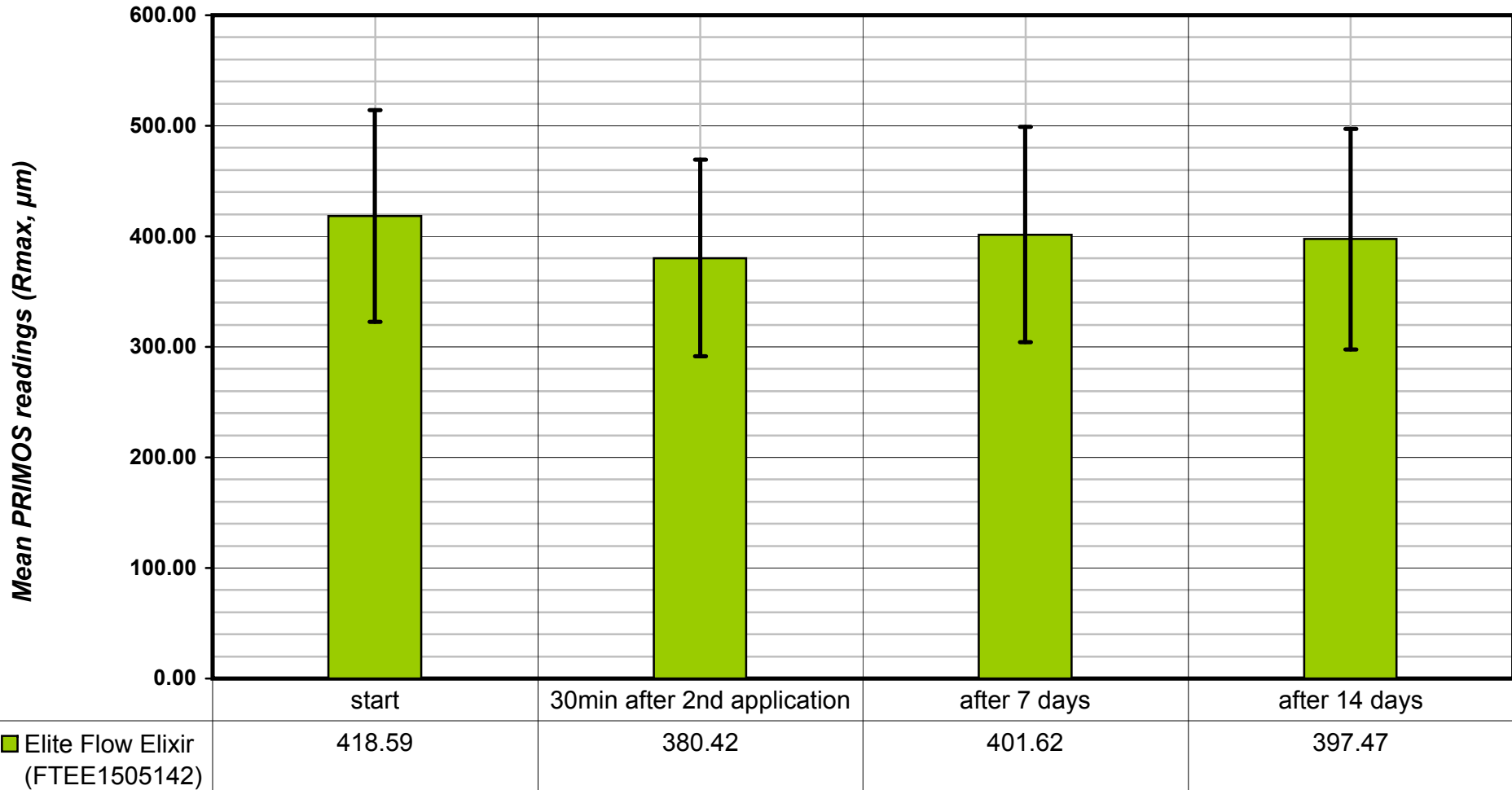
	A
Rank sum (positive)	371
Z-value	2.8384
Significance	0.0035
non-zero observations	30

start - after 14 days

	A
Rank sum (positive)	387
Z-value	3.1675
Significance	0.0010
non-zero observations	30

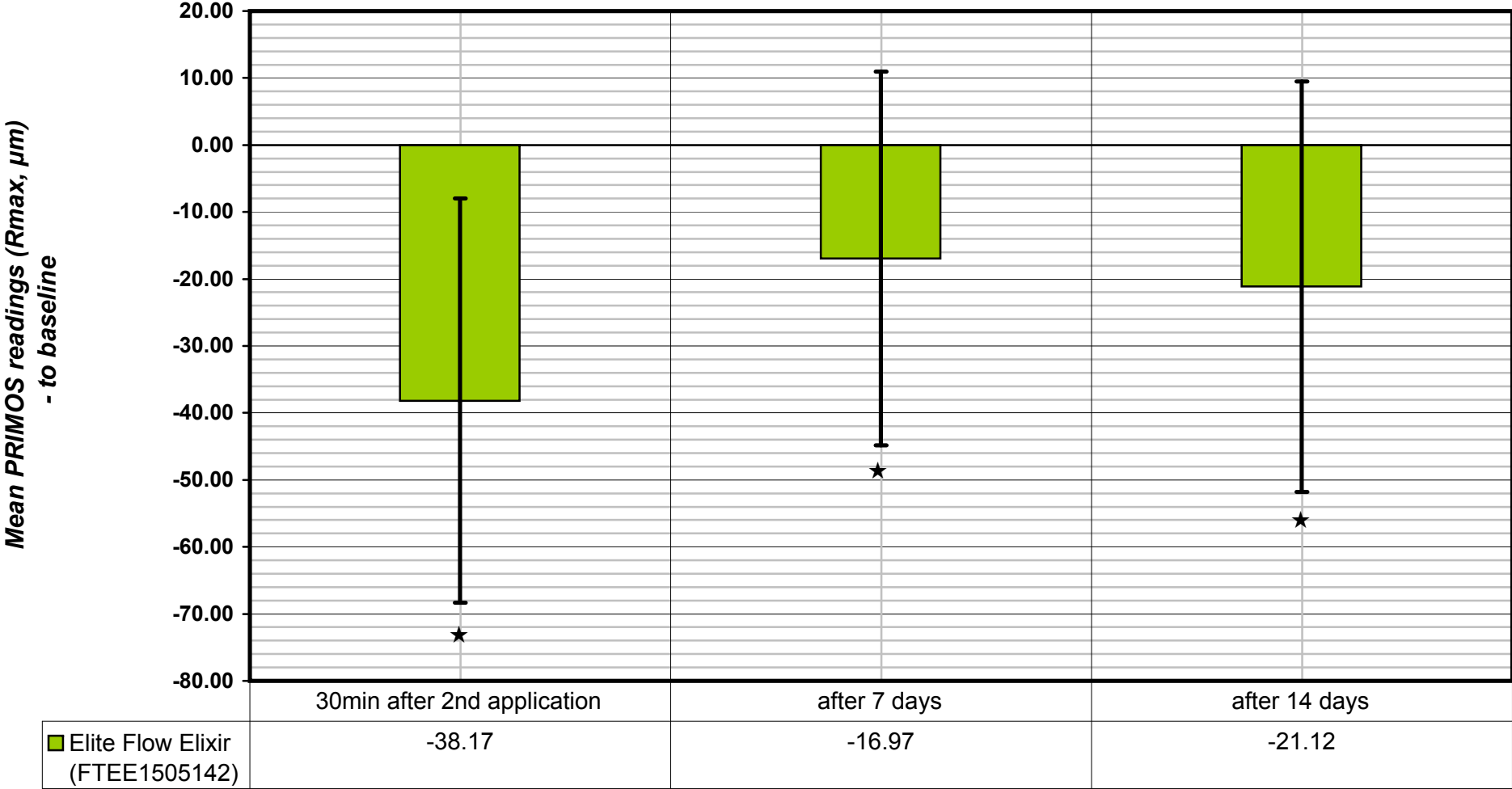
Experimental data of Wrinkle Depth

DCC14W071



Experimental data of Wrinkle Depth (delta values)

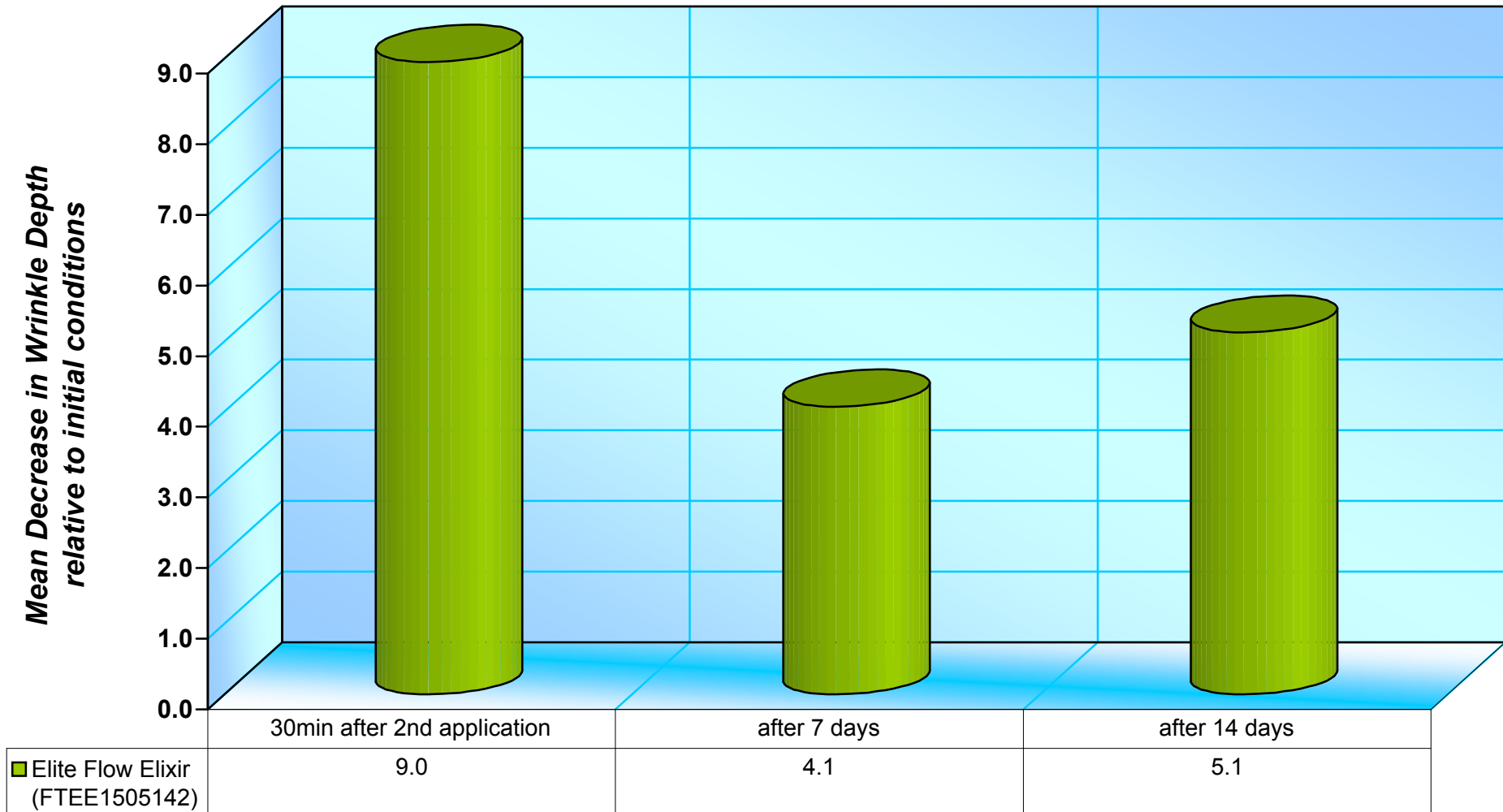
DCC14W071



*p<0,05 versus initial condition

Decrease in Wrinkle Depth relative to initial conditions

DCC14W071



Subject Data, DCC14W071

	Gender	Age	Photo	Side
1	F	53	X	L
2	F	64		R
3	F	37		L
4	F	35		L
5	F	49		L
6	F	38		R
7	F	53		R
8	F	51		R
9	F	42		R
10	F	61		L
11	F	52	X	R
12	F	44		L
13	F	47		L
14	F	57		R
15	F	50	X	R
16	F	48	X	L
17	F	50	X	L
18	F	42		R
19	F	38		R
20	F	60	X	R
21	F	57		L
22	F	40		L
23	F	48		L
24	F	39		R
25	F	44		R
26	F	48		R
27	F	65		L
28	F	54		L
29	F	43		R
30	F	37		L
Average	-	48.2	-	-
S.D.	-	8.4	-	-
Median	-	48.0	-	-