

## Assessment of activity of a product on a panel of volunteers

**STUDY 17E3772** 

**Quote D17-132-2** 

## Study performed on:

- 20 Caucasian women
- Reference:

Rivoli Le visage Emulsion Ré-Equilibrante Lab-00733.6 Batch 103356

Over 28 days

Report transmitted by BIO-EC, on June 20th, 2017



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## **Summary of the study**

#### TITLE:

Assessment of activity of a product on a panel of volunteers

#### AIM OF THE STUDY:

The aim of the study is to assess on a panel of 20 volunteers aged between 30 to 50 years old, the efficacy of a product on firming, dryness, sensibility and redness.

This efficacy will be measured through:

- Face photography by VISIA®
- Moisturizing assessment by Corneometer®
- Firming assessment by Cutometer®
- Hemoglobin assessment by Siascope®
- Dermatological control on redness and dryness
- Self assessment questionnaire

The various measurements were recorded during a first visit at T0 and at T+28 days after a daily application on face.

#### PROGRESS OF THE STUDY:

20 women, aged between 30 to 50 years old, meeting the inclusion and non-inclusion criteria defined by the promoter were included in the study.

#### RESULTS AND CONCLUSION:

The aim of the study was to assess on a panel of 20 volunteers, the efficacy of a product on firming, dryness, sensibility and redness.

Under the conditions of the study and in spite of sensitive skin, the dermatologist concludes to a very good cutaneous tolerance of the product tested. A significant decrease of dryness and redness was observed.

After 28 days of application of the product "Le visage Emulsion Ré-équilibrante", we can conclude that the product:

- Decreases significantly the redness of the skin
- Has a significant moisturizing effect
- Has a significant effect on skin firmness after 28 days of use.



#### 1 AIM OF THE STUDY

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- Self assessment questionnaire

The various measurements were recorded during a first visit at T0 and at T+28 days after a daily application on face.

#### **2 EXPERIMENTAL DESIGN**

#### 2.1 Study design

The efficacy of a the product Emulsion was assessed on 20 women meeting the inclusion and non-inclusion criteria previously defined by the promoter. The measurements were taken in a controlled-atmosphere room ( $22^{\circ}C \pm 2^{\circ}C$ ), after stabilization of the volunteers for at least 10 minutes.

The volunteers used the product from T0 to T+28 days, according to promoter's recommendations.

Each volunteer was asked to notify Laboratory BIO-EC of any discomfort or undesirable event that would occur. They did not stop or change the frequency of application without prior notice. During each visit, assessments were done using the same method.



#### 2.2 Volunteers selection and method

Recruitment (Week 18): Women having between 30 to 50 years old with a dry and sensitive skin.

- First visit at T0: (Week 19), the technician in charge of the study:
- Makes stabilize the volunteer on a control-atmosphere room during 10 minutes,
- Checks out of the criteria of inclusion and non-inclusion,
- Checks out of the well understanding of the study,
- Signing of the agreement by the volunteers,
- Makes initial biometrical measurements on face :
  - VISIA photography
  - Corneometer®
  - Cutometer®
  - Siascope®
- Gives the product and the questionnaire

The dermatologist makes a control of the redness and the dryness on face.

From T0 to T+28 days: Volunteers apply the product on face twice daily

- Final visit at T+28 days: (Week 23), the technician in charge of the study:
- Makes stabilize the volunteer on a control-atmosphere room during 10 minutes,
- Records adverse events,
- Makes biometrical measurements on face :
  - VISIA photography
  - Corneometer®
  - Cutometer®
  - Siascope®
- Retrieves study product and self assessment questionnaire.
- Gives compensation to volunteer.

The dermatologist makes a control of the redness and the dryness on face.



#### 3 VOLUNTEERS

#### 3.1 Inclusion and non-inclusion criteria

#### 3.1.1 Inclusion criteria

- Caucasian women
- Having between 30 to 50 years old,
- With dry and sensitive skin,

The volunteers should commit themselves to:

- Use the product in conformity with the recommendation use
- Not using any other product on the studied zone

#### 3.1.2 Non-inclusion criteria

- Pregnancy or breast feeding women,
- Persons having dermatological problems and/or know allergy to cosmetic products.
- Persons under medical treatment potentially capable of influencing the measured parameters

#### 3.2 Volunteers included in the study

Overall, 20 Caucasians women meeting the inclusion and non-inclusion criteria defined in the protocol were included in the study. They were informed of the possible adverse effects from using the product and the technical conditions in which the assessment is performed. They willingly signed the consent form which was written in compliance with the Declaration of Helsinki and the December 20th, 1988 act of the Code de la Santé Publique.

#### 3.2.1 Demographic characteristics

The demographic characteristics of the volunteer group (mean  $\pm$  SD) are as follows:

Rivoli Le visage Emulsion	N = 20 women
Ré-Equilibrante	A 40
Lab-00733.6 Batch 103356	Age : 42 <u>+</u> 5 years old

#### 3.2.2 Schedule compliance

No volunteer left the study prematurely. All volunteers returned for their appointments.



#### 3.2.3 Concomitant treatments

The volunteers included in the study did not take any concurrent treatment likely to induce a modification of the cutaneous state.

#### 4 PRODUCTS

#### 4.1 Study product

The product was identified as:

### Rivoli Le visage Emulsion Ré-Equilibrante Lab-00733.6 Batch 103356

The product was a cream packed by the promoter in vials.

#### 4.2 Product use

Products were dispatched to volunteers at T0. Volunteers apply twice a day the product on face. The amount of product to be applied was left to the volunteers by their cosmetic habits. Any remarks were noted during the final appointment.



#### 5 METHODS

#### 5.1 Photographies by VISIA®

With VISIA® 6th generation, numeric photographies were performed at T0, T+28 days.

- A photo of the left profile is taken:
- Different parameters can be analysed with the VISIA®: Spots, Wrinkles, Texture, Pores, UV Spots, Brown spots, Red areas and Porphyrines.
- The VISIA® gives 3 types of results :
  - The Lineaments Count gives a count of the number of lesions evaluate by the dispositive, with no concern of the size or the lesion intensity. The lineaments count can be used to see a treatment progress when the decrease of the lesions number for one or many skin features.
  - The Absolute Grades give a complete and comprehensive measure of the lesion impact on the subject skin. They totally consider the size, the surface and the analysed lesions intensity. The absolute grade can also be used to detect a treatment improvement when the lesion size and intensity are the most appropriate to evaluate the treatment efficacy.
  - <u>The Centiles</u> gives a context in which the subject results analysis are compared to the Absolute grades of other subjects who have similar characteristics. Centiles can also be used to give a comparative assessment of the subject's general state.

#### 5.2 Assessment of the cutaneous hydration through Corneometer®

The stratum corneum hydration causes changing in its electrical characteristics. The stratum corneum is like a dielectric corps. Any modifications of its hydration statement cause a variation of the electric capacity measured by a condenser. Higher is the hydration, higher is the electric capacity because its dipolar nature increases the electric permittivity of the environment and its conductibility.

Measurement is realized by the Corneometer CM825TM (Courage & Khazaka electronics). The probe linked to a condenser allows applying at all the time the same pressure on the tegument in order to not disturb the measures and to obtain good experimental conditions reproducibility.



#### 5.3 Firming assessment by Cutometry measurement

The assessment of the mechanical properties of the skin enables to assess the functional state of the following tissue structures:

- The elastic structures (elastic fibers, curvature of the connective bundles, wrinkles of the stratum corneum);
- The viscous-behaving structures (interstitial fluids, internal adherences).

The study is performed using the Cutometer® MPA 580 by Courage & Khazaka. The measuring principle is based on the suction method. Negative pressure is created in the device and the skin is drawn into the cylindrical aperture (2 mm in diameter) of the probe.

Inside the probe, the penetration depth is determined by an optical measuring system. Each suction phase is followed by a relaxing phase.

In this study, the program was the following:

Length of the cycle: 4 seconds

o Suction: 2 seconds

o Relaxation: 2 seconds

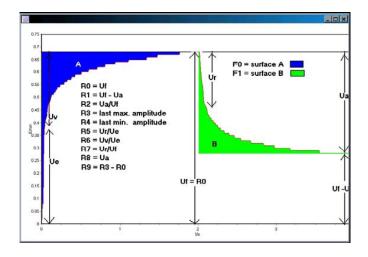
Negative pressure: 500 millibars

• Diameter of the chamber: 2 mm

Area measured: cheekbone

The resistance of the skin to be sucked up by the negative pressure and its ability to return to its original position are displayed as curves at the end of each measurement. From these curves the parameters can be calculated.

In broad outline:





- During the suction phase, the deformation of the skin by the negative pressure measures first the elastic resistance, then the viscous component, which taken together represent **skin firmness**.
- During the relaxation phase, the immediate recovery of the skin measures sheer cutaneous elasticity, whereas the delayed return of the skin to its initial position measures the visco-elastic component.

#### In a more detailed way:

- The deformation of the skin during the suction phase, and its inverse path during the relaxation phase occurs in two steps:
  - An instantaneous path measuring sheer elastic forces:
    - **Ue** (e for "elastic") during suction
    - **Ur** (r for "recovery") during relaxation
  - o A delayed path corresponding to the viscoelastic displacement i.e. to tissue fluidity:
    - **Uv** (v for "viscous") during suction
    - **Ud** (d for "delayed") during relaxation
- The final path **Uf** (f for "final") measuring the total cutaneous deformation can therefore be broken down in several phases:
  - During suction, Uf = Ue + Uv
  - During relaxation, the residual deformation R must be taken into account: Uf = Ur + Ud + R; with Ur + Ud = Ua (a for "added") being the total recovery.

The creep test results that evaluate the mechanical skin properties are not easy to read into so several parameters are formally considered:

- R0 or Uf that represent the skin raisin amplitude during the suction.

At equal pressure, the more the skin will be supple, the more the amplitude will be important. At the end, R0 or Uf evaluate the viscoelastic distensibility, in other words the skin firmness.

Observations were realized by comparing volunteers at T0 and T+28 days.



#### 5.4 Visualization of hemoglobin by Siascope®

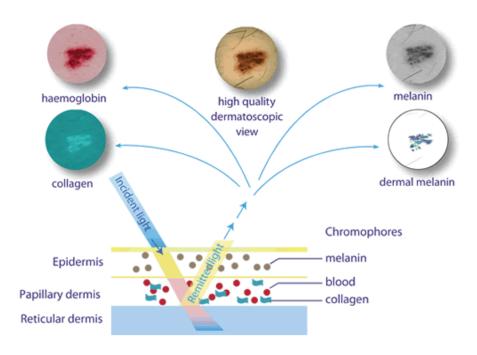
SIAscope enables through a quick and painless non-invasive method, to measure the quantity of hemoglobin, melanin and collagen on the stratum corneum, skin and dermis to a depth of 2mm.

SIAscope use the power of light which interacted with skin. The light across the skin scatters or bounces according to the amount absorbed by the cells.

All of this enables skin analysis using high throughput spectrophotometer methods.

Lights simulations are performed to reproduce hundreds of thousands different combinations of hemoglobin, melanin, collagen and dermal melanin.

Results of each simulation are stored and then surveyed to produce a Siascan. Each Siascan is an image representing the concentration of each chromophore on each pixel.



Only « hemoglobin » parameter was analyzed.

Measurements were done at T0 and T+28 days.

#### 5.5 Dermatological assessment

The dermatologist carries out an examination of the dryness and the redness of the skin at T0 and T + 28 days.

- Dryness: Score given between 0 (not dry) and 6 (very dry).
- Redness: Score given between 0 (absence) and 6 (very pronounced redness).

#### 5.6 Self assessment questionnaire

Assessment of the sensation felt, efficacy and cosmetic quality of the product was performed through a self-assessment questionnaire completed on Eval&Go by volunteers after 21 days of product application and after 42 days of product application.

Eval & GO is a SaaS application of feedback management. It permits to create On-line surveys, to publish them by link or by email, to collect the answers and analyze the results in real time. Access to the service is via an internet connection and a recent web browser (Internet Explorer 9+, Chrome, Safari, Firefox). It is on the basis of subscriptions without no installation on computers. Any use of Eval & GO software or services is subject to the terms and conditions.

#### 6 RESULTS

#### 6.1 Atmospheric conditions around Paris

Maximal and minimal temperatures around Paris during the study were:

- May (T0): 7.1 °C to 32.3°C

- June (T+28 days): 10.5°C to 28.3°C

#### 6.2 Statistical method

The basic statistical parameters (mean and standard deviation) were calculated for each data point and recorded. Then, the assessment of the overall effect of the test product was made by calculating the variation of percentage compared to the initial measurement.

In order to determine whether the identified changes were significant or not, a Student's t-test was performed. The statistical analysis (through Prism v5.04 software by GraphPad) was made with Student's t-test on paired samples. The assumptions were the randomness and normal distribution of the samples.

#### 6.3 Protocol deviation

All inclusion and evaluation criterion were respected.

#### 6.4 Undesirable events

No adverse effects occurred during the study.



#### 6.5 Results of dermatologist assessment

#### 6.5.1 Dryness assessment

	Values		Delta of	% of	% of	
	ТО	T+28 days	variation T+28 days	variation T+28 days	responders	
Emulsion	1,85 ± 0,49	1,15 ± 0,75	-0,70 ± 0,73	-38 %***	55%	

After 28 days of application of the product Emulsion, the dermatologist observed a significant decrease of the dryness by **38%** (p=0.0004).

#### 6.5.2 Redness assessment

	Values		Delta of	% of	% of	
	T0	T+28 days	variation T+28 days	variation T+28 days	responders	
Emulsion	2,30 ± 0,80	1,55 ± 0,89	-0,75 ± 0,79	-33 %***	55%	

After 28 days of application of the product Emulsion, the dermatologist observed a significant decrease of the redness by **33%** (p=0.0004).

→ Under the conditions of the study and in spite of sensitive skin, the dermatologist concludes to a very good cutaneous tolerance of the product tested. A significant decrease of dryness and redness was observed.

#### 6.6 Results of redness areas by VISIA®

Means of redness areas parameter for the global population are gathered in the table below. Individual values for each volunteer are presented in the appendixes.

		Values		Delta of	% of	% of	
		ТО	T+28 days	variation T+28 days	variation T+28 days	responders	
	Emulsion	0,38 ± 0,11	0,40 ± 0,11	0,02 ± 0,06	5 %	25%	
	# Significant p<0.1 * Significant p<0.05 **Significant p<0.01 ***Significant p<0.001						

# Significant p<0.1

\* Significant p<0.05

"\*Significant p<0.01

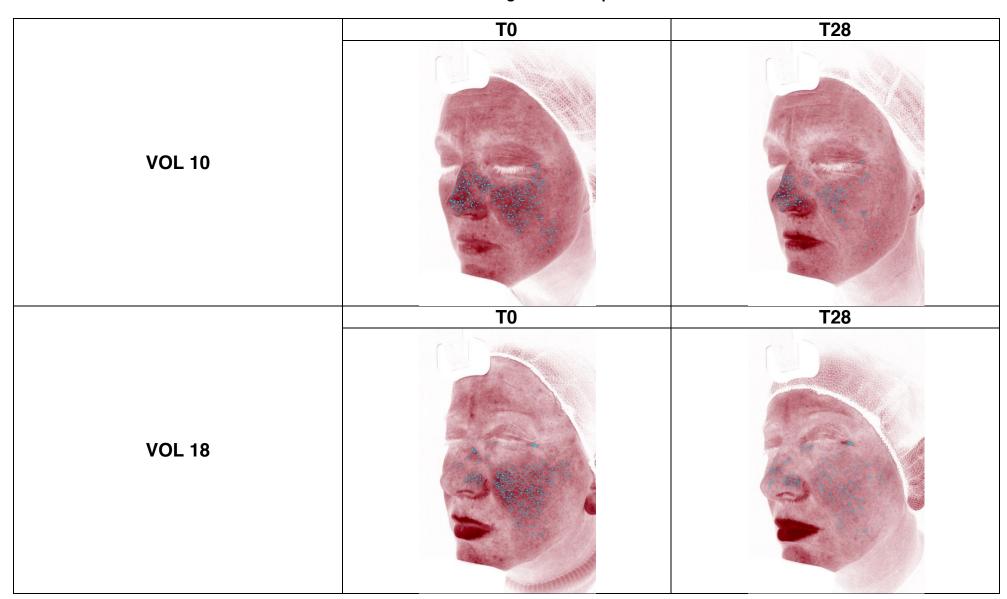
\*\*\*Significant p<0.001

28 days after application of the product Emulsion, we can observe:

- → A non significant increase by **5%** of redness areas (p=0.1481)
- → We can conclude that the application of the product Emulsion for 28 days has no effect on the redness.



#### 6.6.1 Illustration of redness areas among the best respondents





#### 6.7 Hemoglobin assessment by Siascope®

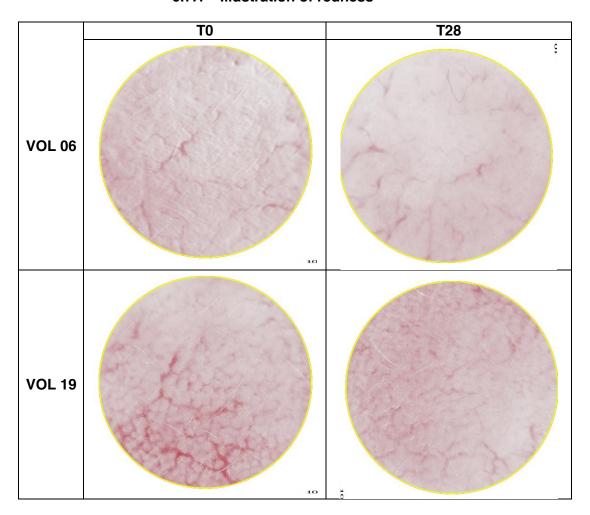
Means of hemoglobin values for the global population are gathered in the table below. Individual values for each volunteer are presented in the appendixes.

	Values		Delta of	% of	% of	
	ТО	T+28 days	variation T+28 days	variation T+28 days	responders	
Emulsion	187,88 ± 41,75	149,39 ± 23,60	-38,48 ± 37,04	-20 %***	100%	
# Significant p<0.1 *		ignificant p<0.05	**Significant p<0.0	01 ***Significa	nt p<0.001	

After 28 days of application we can observe:

- → A significant decrease by **20%** of the hemoglobin (p<0.001) with the use of the product.
- → We can conclude that the product Emulsion decreases significantly the redness of the skin after 28 days of application.

6.7.1 Illustration of redness





#### 6.8 Moisturizing assessment by Corneometer®

Means of skin moisturizing values for the global population are gathered in the table below. Individual values for each volunteer are presented in the appendixes.

	Values		Delta of	% of	% of	
	ТО	T+28 days	variation T+28 days	variation T+28 days	responders	
Emulsion	47,37 ± 15,01	56,79 ± 13,31	9,42 ± 12,60	20 %**	70%	

<sup>#</sup> Significant p<0.1

After 28 days of application we can observe:

- → A significant improvement by **20%** of skin moisturizing (p=0.0043) with the use of the product.
- → We can conclude that the product Emulsion has a significant moisturizing effect after 28 days of application

#### 6.9 Results of firming assessment by Cutometry measurement

#### 6.9.1 Skin's firmness R0

Means of R0 parameter are gathered in the table below. Individual values for each volunteer are presented in the appendixes.

	Kin	etics	Delta of variation	% of variation	% of responders
	ТО	T+28days	T+28days	T+28days	T+28days
Product	0,374±0,079	0,302±0,050	-0,072 ± 0,062	-19,3 %***	85%

<sup>#</sup> Significant p<0.1

After 28 days of application we can observe:

- A significant improvement of R0 parameter by 19,3% (p-value < 0.001) with the use of the product, indicated an improvement of skin firmness.
- → We can conclude that the product Emulsion has a significant effect on skin firmness after 28 days of use.

<sup>\*</sup> Significant p<0.05

<sup>\*\*</sup>Significant p<0.01

<sup>\*\*\*</sup>Significant p<0.001

<sup>\*</sup> Significant p<0.05

<sup>\*\*</sup>Significant p<0.01

<sup>\*\*\*</sup>Significant p<0.001



#### 6.10 Self assessment questionnaire

#### 6.10.1 Appreciation of organoleptic and sensory qualities

#### Global evaluation and global aspect of the product

	Very pleasant	Pleasant	Nor pleasant, Neither unpleasant	Unpleasant	Very unpleasant
GLOBAL APPRECIATION	45%	45%	10%	0%	0%
Aspect	55%	30%	15%	0%	0%
Texture	50%	40%	10%	0%	0%
Fragrance	30%	50%	20%	0%	0%

#### After 28 days of daily application:

- 90 % of volunteers found that the product was very pleasant or pleasant.
- 85% of volunteers thought that the aspect of the product was very pleasant or pleasant.
- 90 % of volunteers thought that the texture of the product was very pleasant or pleasant.
- 80 % of volunteers thought that the fragrance of the product was very pleasant or pleasant.

#### Product use

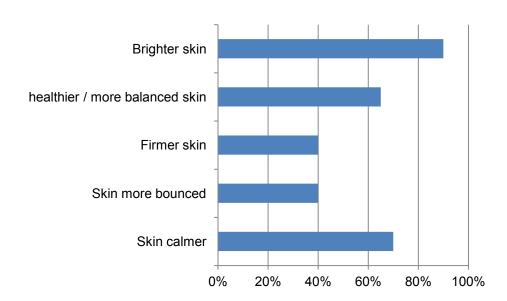
- 95 % of volunteers included in the study found that the product was easy to apply.
- 85 % of volunteers included in the study found that the product penetrates easily.
- 50 % of volunteers included in the study felt an improvement of the elasticity of the skin after application of the product.
- 30 % of volunteers included in the study noticed an improvement of their skin firmess.
- 45 % of volunteers included in the study noticed a decrease of their skin sensibility.
- 45 % of volunteers included in the study noticed a decrease of their redness and irritations.



#### 6.10.2 Assessment of the efficacy

After 28 days of use :	Much more	More	No change	Less	Much less
Skin calmer	15%	55%	30%	0%	0%
Skin more bounced	0%	40%	60%	0%	0%
Firmer skin	5%	35%	60%	0%	0%
Healthier / more balanced skin	5%	60%	35%	0%	0%
Brighter skin	10%	45%	45%	0%	0%

#### **Graphical representation of the questionnaire's results:**





#### 6.10.3 Conclusion

#### In conclusion:

- 10 % of volunteers included in the study felt an unpleasant sensation or incomfort.
- No volunteers interrupted the treatment.
- 80 % of volunteers included in the study would like to continue to use this product.
- At the end of this test and independently of the price:

	Yes, certainly	Yes, probably	l don't know	No, probably not	No, certainly not
Would you like to buy this product?	25%	35%	25%	15%	0%

60 % of volunteers would like to buy this care.

#### 7 CONCLUSION

The aim of the study was to assess on a panel of 20 volunteers, the efficacy of a product on firming, dryness, sensibility and redness.

Under the conditions of the study and in spite of sensitive skin, the dermatologist concludes to a very good cutaneous tolerance of the product tested. A significant decrease of dryness and redness was observed.

After 28 days of application of the product "Le visage Emulsion Ré-équilibrante", we can conclude that the product:

- Decreases significantly the redness of the skin
- Has a significant moisturizing effect
- Has a significant effect on skin firmness after 28 days of use.



#### 8 STUDY REPORT ARCHIVING

#### Raw data filing

The raw data consists of:

- Image analysis results
- Assays results
- Biometrological results using devices

All the raw data is kept in a paper file and a backup is saved when it is possible (depending on the used device).

#### Products ; samples ; blocks and blades filing

The products entrusted to BIO-EC are preserved one year after using the tested product.

The blocs, the stained and immunostained slides revealed by alkaline phosphatase and peroxidase are kept at BIO-EC's for fifteen years.

The frozen blocs will stay in possession of BIO-EC for two years at minus 80°C. If the culture media are harvested during the study, they will be stored for two years at minus 80°C.

After that, and without any other instructions from the client, they will all be destroyed.

#### Final report filing

The paper file is archived and kept for 20 years

The study report (raw data, images, preliminary reports, final report) and all the computer data are saved thanks to a double internal backup (KERTEL BOX2CLOUD, RAID 1) and by an automated and daily external system, Backupia (KERTEL Group).

Our computer system is protected by the anti-viruses Microsoft Security Essential, F-Secure and McAfee Saas.











# Appendixes



## **Characteristics of volunteers**

Volunteer	Age	
1	39	
2	45	
3	47	
4	43	
5	32	
6	46	
7	43	
8	42	
9	30	
10	46	
11	38	
12	45	
13	35	
14	45	
15	45	
16	47	
17	46	
18	48	
19	49	
20	38	



## **Results of corneometer**

Volunteers		C	orneometer	
volunteers	T0	T28	T28 - T0	% T28
1	33,00	39,00	6,00	18,18%
2	29,00	40,00	11,00	37,93%
3	46,00	55,00	9,00	19,57%
4	22,00	45,00	23,00	104,55%
5	39,00	47,00	8,00	20,51%
6	58,00	47,00	-11,00	-18,97%
7	48,00	50,00	2,00	4,17%
8	47,00	57,00	10,00	21,28%
9	30,00	59,00	29,00	96,67%
10	45,00	48,00	3,00	6,67%
11	40,00	51,00	11,00	27,50%
12	60,00	28,00	-32,00	-53,33%
13	70,00	83,00	13,00	18,57%
14	41,00	68,00	27,00	65,85%
15	66,00	62,00	-4,00	-6,06%
16	36,00	57,00	21,00	58,33%
17	52,00	85,00	33,00	63,46%
18	66,50	65,00	-1,50	-2,26%
19	55,00	47,00	-8,00	-14,55%
20	76,50	74,00	-2,50	-3,27%
MEAN	47,37	56,79	9,42	20%
SD	15,01	13,31	12,60	



## **Results of VISIA**

Volunteers	s VALUES		DELTA VARIATION	% VARIATION
	T0	T+28 days	T+28 days - T0	T+28 days
1	0,329353	0,362974	0,033621	10%
2	0,299651	0,322772	0,023121	8%
3	0,327585	0,371067	0,043482	13%
4	0,271195	0,303022	0,031827	12%
5	0,197392	0,185923	-0,011469	-6%
6	0,536668	0,559914	0,023246	4%
7	0,544387	0,607276	0,062889	12%
8	0,418691	0,467263	0,048572	12%
9	0,417664	0,413318	-0,004346	-1%
10	0,435981	0,385377	-0,050604	-12%
11	0,381652	0,447677	0,066025	17%
12	0,322654	0,393189	0,070535	22%
13	0,265512	0,32482	0,059308	22%
14	0,335404	0,366113	0,030709	9%
15	0,346853	0,369947	0,023094	7%
16	0,360997	0,413329	0,052332	14%
17	0,550858	0,499386	-0,051472	-9%
18	0,46959	0,297688	-0,171902	-37%
19	0,542638	0,607825	0,065187	12%
20	0,215995	0,256674	0,040679	19%
·	0,38	0,40	0,02	5%
	0,11	0,11	0,06	



## **Results of Siascope**

Voluntoero	Siascope					
Volunteers	T0	T28	T28 - T0	% T28		
1	261,400	137,458	-123,94	-47,41%		
2	249,328	148,574	-100,75	-40,41%		
3	225,233	142,819	-82,41	-36,59%		
4	250,145	136,826	-113,32	-45,30%		
5	190,366	157,550	-32,82	-17,24%		
6	205,114	171,384	-33,73	-16,44%		
7	213,741	167,878	-45,86	-21,46%		
8	207,213	164,949	-42,26	-20,40%		
9	175,582	139,530	-36,05	-20,53%		
10	182,045	160,902	-21,14	-11,61%		
11	190,902	176,453	-14,45	-7,57%		
12	135,846	125,104	-10,74	-7,91%		
13	141,180	131,343	-9,84	-6,97%		
14	149,307	145,170	-4,14	-2,77%		
15	141,886	124,347	-17,54	-12,36%		
16	174,442	159,144	-15,30	-8,77%		
17	165,972	144,170	-21,80	-13,14%		
18	160,252	126,464	-33,79	-21,08%		
19	225,731	216,398	-9,33	-4,13%		
20	111,860	111,394	-0,47	-0,42%		
MEAN	187,88	149,39	-38,48	-20%		
SD	41,75	23,60	37,04			



## **Results of Cutometer**

Results of cutometer-R0 (Firmness)				
Volunteers	то	T+28 days	Delta T+28days- T0	% of variation T+28 days
1	0,419	0,354	-0,065	-15,4%
2	0,293	0,304	0,011	3,6%
3	0,419	0,258	-0,161	-38,5%
4	0,393	0,322	-0,071	-18,1%
5	0,526	0,445	-0,080	-15,3%
6	0,472	0,312	-0,160	-34,0%
7	0,357	0,322	-0,034	-9,6%
8	0,372	0,293	-0,080	-21,4%
9	0,335	0,214	-0,120	-35,9%
10	0,279	0,242	-0,036	-13,0%
11	0,358	0,344	-0,014	-4,0%
12	0,327	0,312	-0,015	-4,7%
13	0,365	0,302	-0,064	-17,4%
14	0,460	0,295	-0,165	-35,8%
15	0,509	0,341	-0,168	-33,0%
16	0,380	0,276	-0,104	-27,3%
17	0,364	0,260	-0,103	-28,4%
18	0,198	0,233	0,035	17,7%
19	0,347	0,293	-0,054	-15,6%
20	0,310	0,315	0,005	1,5%
Mean	0,374	0,302	-0,072	-19,3%
SD	0,079	0,050	0,062	



## **Results of dermatological control**

Volunteers	Dryness			
Volunteers	T0	T28	T28 - T0	% T28
1	2,00	0,00	-2,00	-100,00%
2	1,00	1,00	0,00	0,00%
3	2,00	2,00	0,00	0,00%
4	2,00	1,00	-1,00	-50,00%
5	2,00	0,00	-2,00	-100,00%
6	2,00	2,00	0,00	0,00%
7	3,00	3,00	0,00	0,00%
8	2,00	2,00	0,00	0,00%
9	2,00	1,00	-1,00	-50,00%
10	2,00	1,00	-1,00	-50,00%
11	2,00	2,00	0,00	0,00%
12	2,00	1,00	-1,00	-50,00%
13	2,00	0,00	-2,00	-100,00%
14	2,00	1,00	-1,00	-50,00%
15	2,00	1,00	-1,00	-50,00%
16	2,00	1,00	-1,00	-50,00%
17	1,00	1,00	0,00	0,00%
18	1,00	1,00	0,00	0,00%
19	1,00	1,00	0,00	0,00%
20	2,00	1,00	-1,00	-50,00%
MEAN	1,85	1,15	-0,70	-38%
SD	0,49	0,75	0,73	



Volunteers			Redness	
Volunteers	T0	T28	T28 - T0	% T28
1	2,00	0,00	-2,00	-100,00%
2	2,00	1,00	-1,00	-50,00%
3	1,00	1,00	0,00	0,00%
4	2,00	1,00	-1,00	-50,00%
5	2,00	0,00	-2,00	-100,00%
6	3,00	3,00	0,00	0,00%
7	4,00	3,00	-1,00	-25,00%
8	3,00	2,00	-1,00	-33,33%
9	3,00	1,00	-2,00	-66,67%
10	3,00	2,00	-1,00	-33,33%
11	2,00	2,00	0,00	0,00%
12	2,00	2,00	0,00	0,00%
13	2,00	1,00	-1,00	-50,00%
14	1,00	1,00	0,00	0,00%
15	1,00	1,00	0,00	0,00%
16	2,00	2,00	0,00	0,00%
17	3,00	1,00	-2,00	-66,67%
18	3,00	2,00	-1,00	-33,33%
19	3,00	3,00	0,00	0,00%
20	2,00	2,00	0,00	0,00%
MEAN	2,30	1,55	-0,75	-33%
SD	0,80	0,89	0,79	