



Special
Chemicals

SCH Special Eyes Flash Contour

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01

Introduction

01

Introduction

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- / Periorbicular rhytidosis
- / Anticoagulant
- / Detoxifying
- / Draining
- / Anti-inflammatory
- / Lifting
- / Texturizing
- / Moisturizing





01.1 Acetyl Tetrapeptide-5

Draining / Decongestive / Anti-glycation

Acetyl tetrapeptide-5 (ATP-5) is a peptide with exceptional anti-endemic properties (draining and decongestive) with proven effectiveness to reduce bags, drooping eyelids and dark circles through a double action mechanism: collagen anti-glycation and inhibiting the vascular permeability that causes edema.

01.2 Acetyl Hexapeptide-8 & Acetyl Octapeptide-3

BTX Lifting Effect / Periorbicular Rhytidosis

“BTX tensor effect” biotechnological complex formed of Acetyl Hexapeptide-8 (AHP-8) and Pentapeptide-18 (PP-18) in a 2:1 proportion. Its synergistic action prevents the gestural appearance of expression wrinkles by mitigating muscular contraction through the presynaptic pathway. AHP-8 competes with SNAP-25 for a position in the SNARE complex (muscular contraction), destabilizing its formation through a competitive inhibition mechanism. PP-18 prevents Ca^{2+} from entering the neurons of the muscular tissue, reducing its excitability. The two peptides modulate glutamate release in a complementary manner (+40%). It maintains the anti-wrinkle effect of a BonT-A injection (Botox) in the frontal and periorbital area, prolonging its effect by 6 months.





01.3 K1 Vitamine (oxide)

Anticoagulant / Detoxifying

K Vitamin is necessary for the synthesis of prothrombin (factor II) and clotting factors VII, IX and X. Vitamin K blocks the formation of hemosiderin by preventing the extravasation of blood (vascular permeability).

Vitamin K oxide has detoxifying properties of ROS species caused by xenobiotics and solar radiation. As a clotting agent, it prevents the appearance of vascular hyperchromias, especially in the orbit (dark circles).

01.4 Dipeptide-2

Draining / Anti-inflammatory

Dipeptide of the amino acids valine and tryptophan (VW), with high bioavailability and self-similarity with certain essential components of the natural moisturizing factor (NMF).

Dipeptide-2 stimulates lymphatic and vascular flow, reducing interstitial metabolic deposits pocketed in the lower palpebral area (bags). Its vascular action mechanism is based on inhibiting the activity of the angiotensin converting enzyme (ACE) and, therefore, on prolonged bradykinin action.

In the lymphatic system, dipeptide-2 increases the frequency of contraction and pumping of lymphangiomas, which function as small lymphatic hearts, reducing the hypertensive effect associated with bags. Its soothing and decongestive properties on the periorbicular area are due to its inhibiting effect on interleukin-6 (IL-6).





01.5 Pullulan

Lifting / Texturizing / Moisturizing

Pullulan is a natural polysaccharide of maltotriose obtained through fermentation of the *Aureobasidium* mold.

Its ability to form a laminate film on the surface of the skin, similar to the dermal extracellular matrix (DEM), gives it moisturizing, lifting and firming properties.

The film-forming effect of Pullulan provides support and structure to the orbicular area, characterized by low dermal thickness, while electrostatically promoting the intercellular permeability of active ingredients with low molecular weight such as Vitamin K oxide and opto-cosmetic peptides.

02

Anti-dark circles efficacy test under dermatological control

02.1 Results

Tolerance evaluation

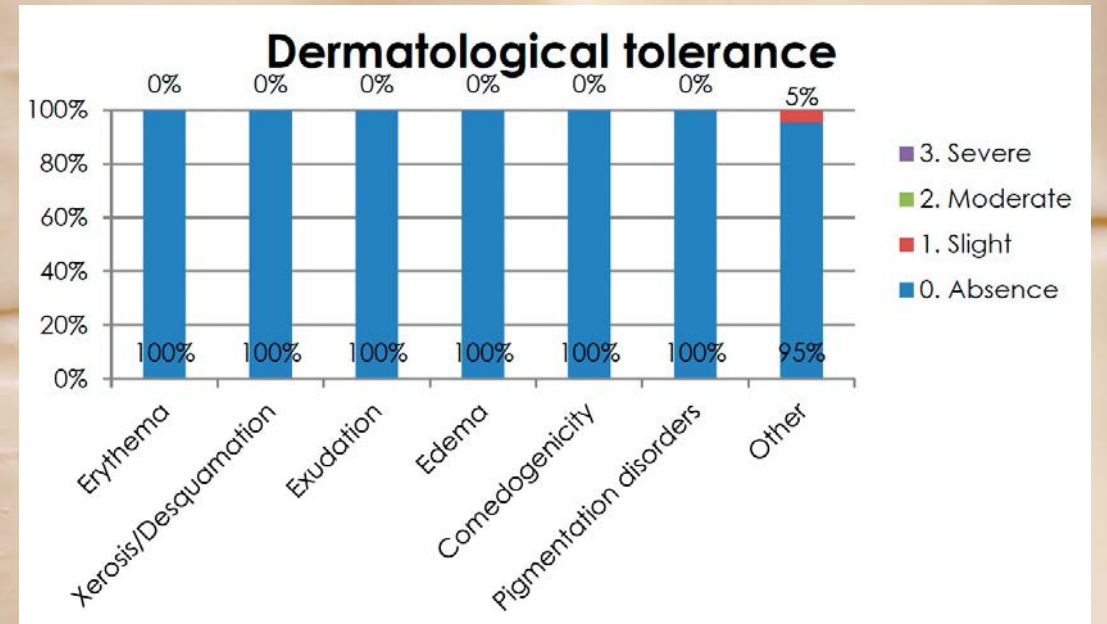


Figure 1. Alterations evaluated by the dermatologist (n=22)

02.1 Results

Dark circles scale

- After 28 days, there is a statistically non-significant average decrease (2.2%) when compared to T0, so the bags and dark circles improve.
- After 56 days, there is a statistically significant average decrease (4.3%) when compared to T0, so the bags and dark circles improve.

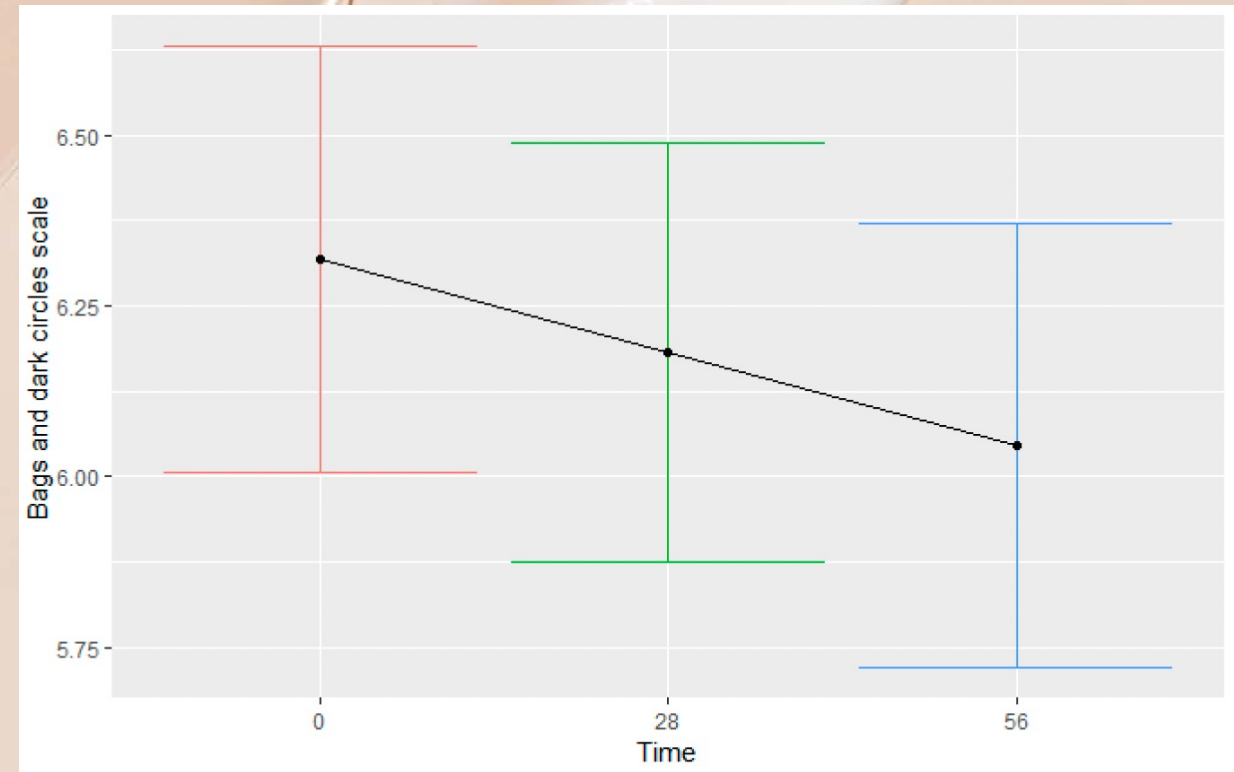


Figure 2. Average result of the parameter \pm standard error at each experimental time. The trend of the data over time is visualized.

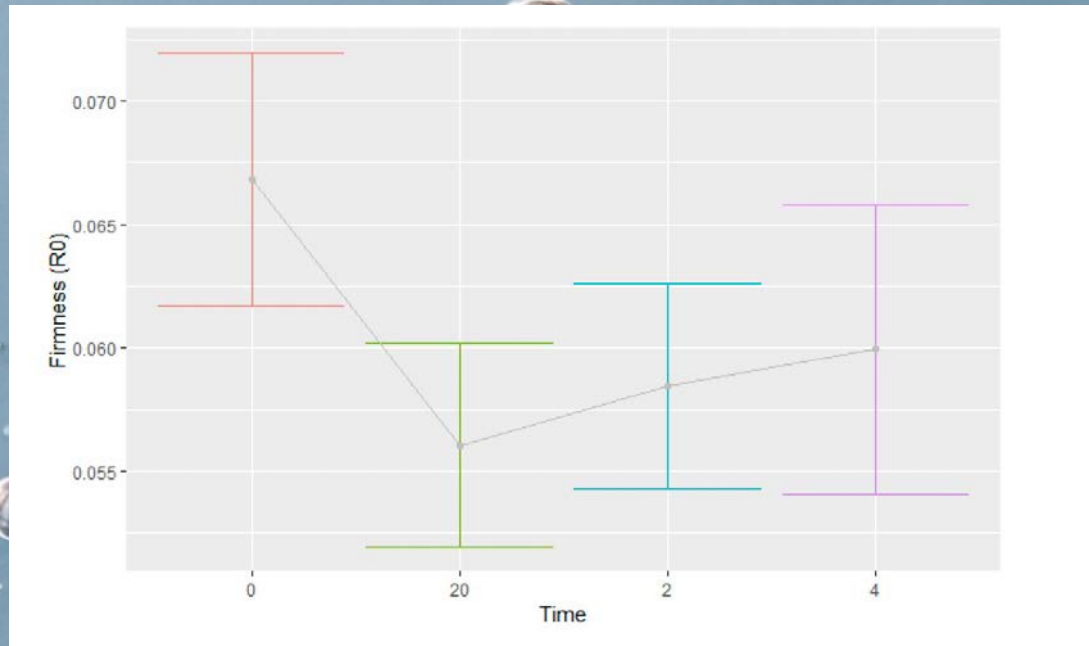


Figure 3. Average result of the parameter \pm standard error at each experimental time. The trend of the data over time is visualized.

02.2 Instrumental efficacy evaluation

02.2.1. Evaluation of firming efficacy

- After 20 minutes, there is a statistically non-significant average decrease (16.4%) when compared to T0, so the firmness improves.
- After 2 hours, there is a statistically non-significant average decrease (13.4%) when compared to T0, so the firmness improves.
- After 4 hours, there is a statistically non-significant average decrease (10.4%) when compared to T0, so the firmness improves.

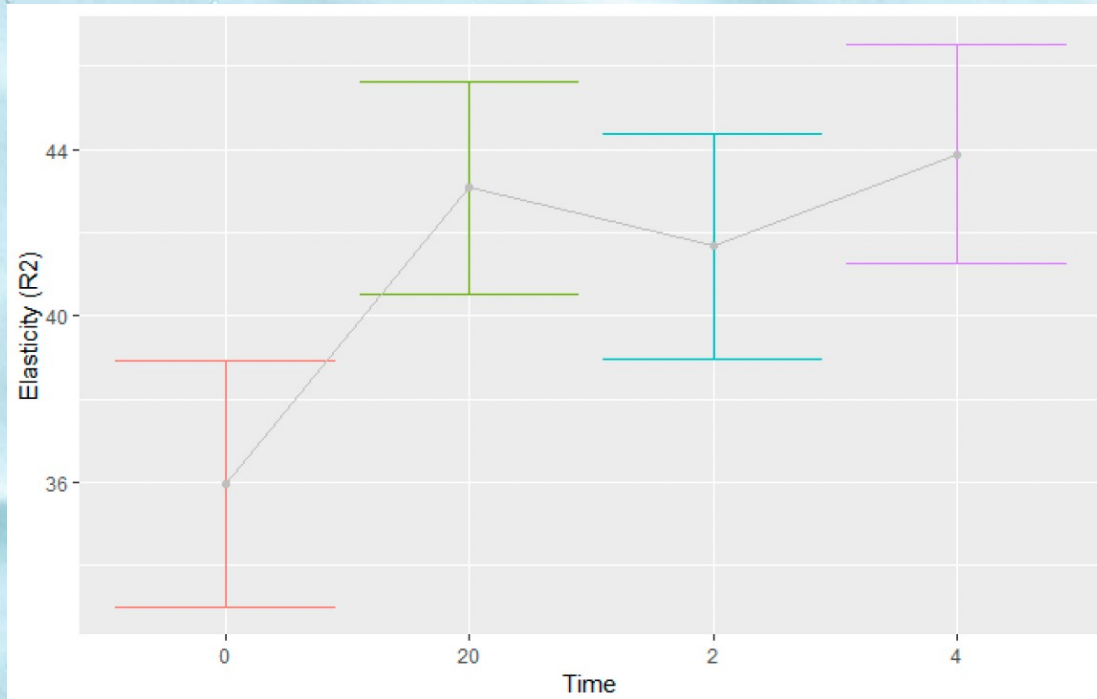


Figure 4. Average result of the parameter \pm standard error at each experimental time. The trend of the data over time is visualized.

02.2 Instrumental efficacy evaluation

02.2.2. Evaluation of elasticity efficacy

- After 20 minutes, there is a statistically non-significant average increase (19.8%) when compared to T0, so the elasticity improves.
- After 2 hours, there is a statistically non-significant average increase (15.9%) when compared to T0, so the elasticity improves.
- After 4 hours, there is a statistically non-significant average increase (22.1%) when compared to T0, so the elasticity improves.

02.2 Instrumental efficacy evaluation

02.2.3. Evaluation of moisturizing efficacy

- After 2 hours, there is a statistically non-significant average increase (0.3%) when compared to T0, so the hydration improves.
- After 6 hours, there is a statistically non-significant average increase (4.5%) when compared to T0, so the hydration improves.
- After 24 hours, there is a statistically non-significant average increase (2.9%) when compared to T0, so the hydration improves.
- After 28 days, there is a statistically non-significant average increase (4.5%) when compared to T0, so the hydration improves.
- After 56 days, there is a statistically non-significant average increase (3.8%) when compared to T0, so the hydration improves.

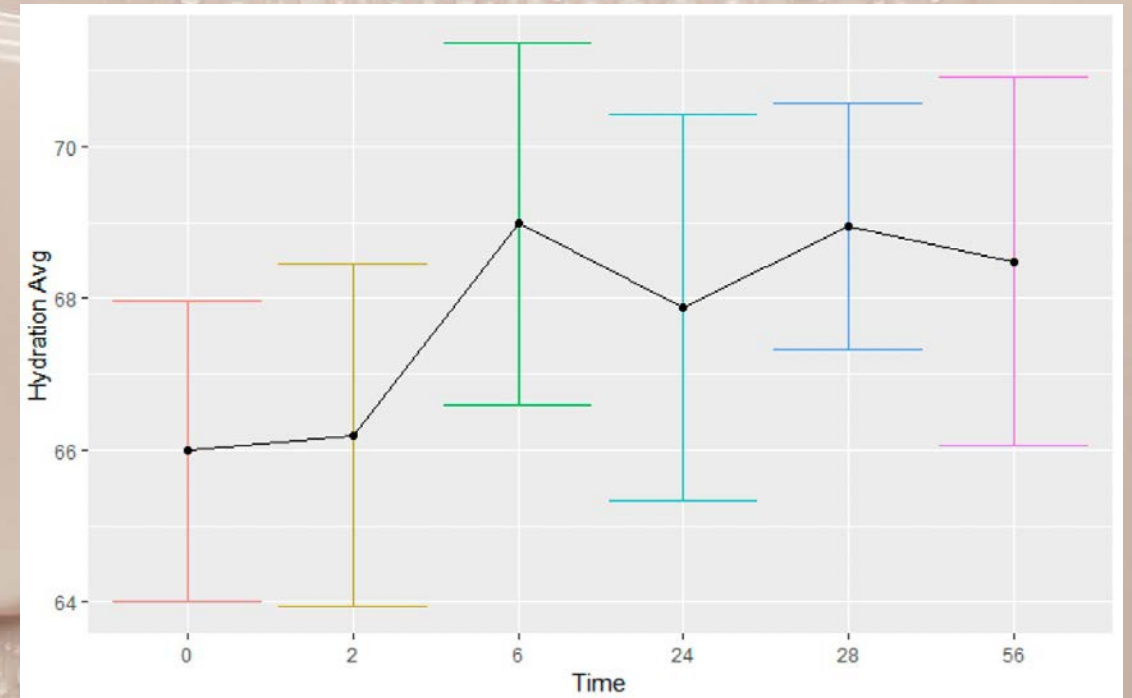


Figure 5. Average result of the parameter \pm standard error at each experimental time. The trend of the data over time is visualized.

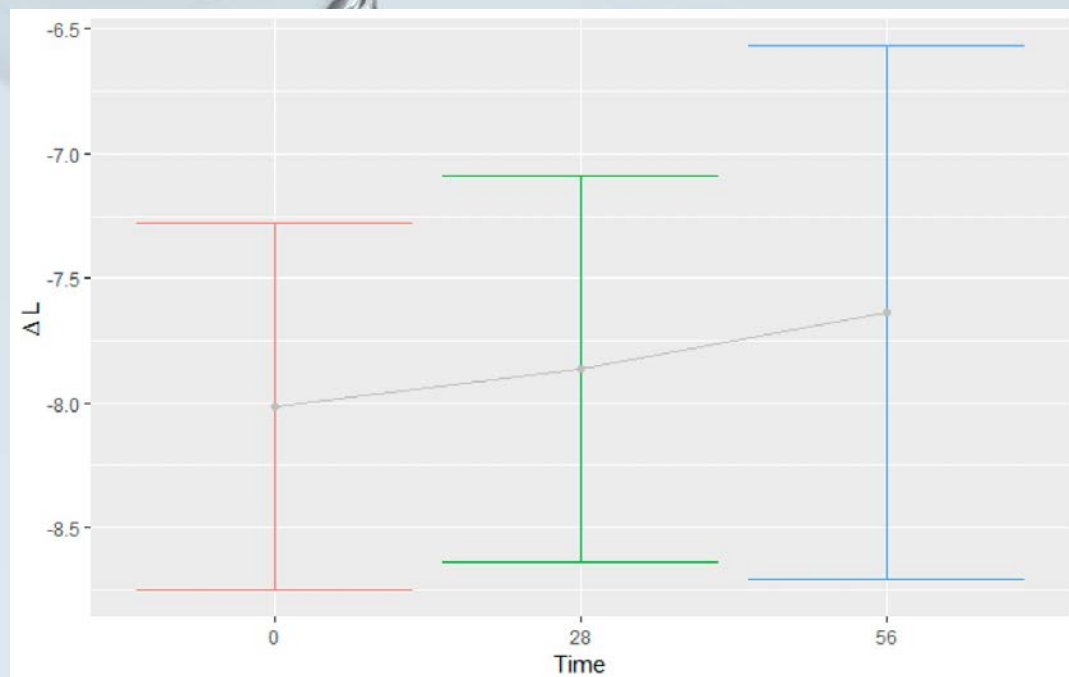


Figure 6. Mean parameter result \pm standard error at each experimental time. The trend of the data over time is displayed.

02.2 Instrumental efficacy evaluation

02.2.4. Luminosity evaluation

- After **28 days**, there is a **statistically non-significant average increase (2%)** when compared to T0, so the brightness improves.
- After **56 days**, there is a **statistically non-significant average increase (4.7%)** when compared to T0, so the brightness improves.

02.2 Instrumental efficacy evaluation

02.2.5. Colour evaluation

- After 28 days, there is a statistically non-significant average decrease (8.8%) when compared to T0, so the tone improves.
- After 56 days, there is a statistically non-significant average decrease (10.9%) when compared to T0, so the tone improves.

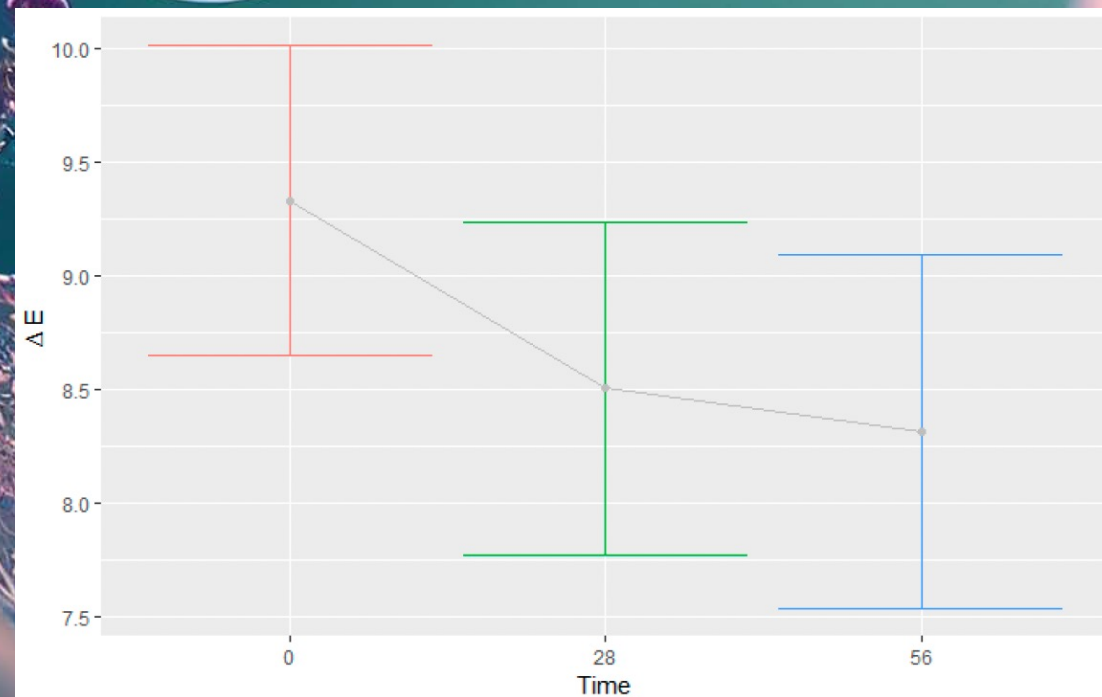


Figure 7. Average result of the parameter \pm standard error at each experimental time. The trend of the data over time is visualized.

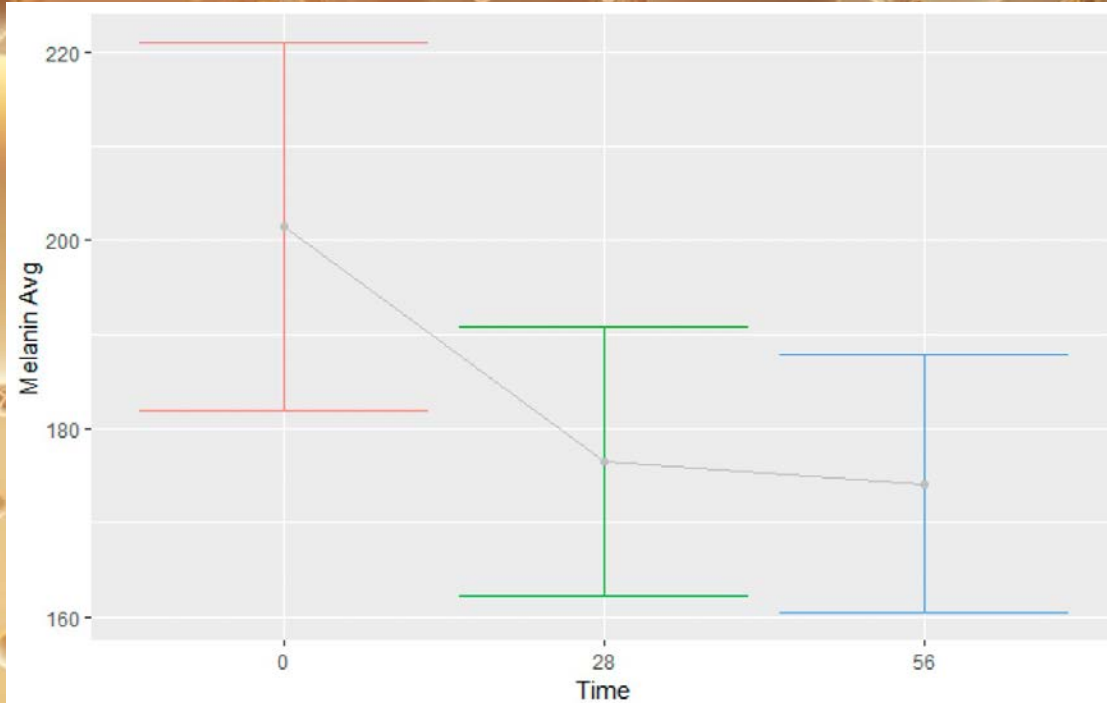


Figure 8. Average result of the parameter \pm standard error at each experimental time. The trend of the data over time is visualized.

02.2 Instrumental efficacy evaluation

02.2.6. Evaluation of dark circle coloration (melanin)

- After 28 days, there is a statistically non-significant average decrease (12.4%) when compared to T0, so the melanin improves.
- After 56 days, there is a statistically non-significant average decrease (13.6%) when compared to T0, so the melanin improves.

02.2 Instrumental efficacy evaluation

02.2.7 Efficacy in decreasing of bags

- After 28 days, there is a statistically non-significant average decrease (13.3%) when compared to T0, so the stock markets improve.
- After 56 days, there is a statistically significant average decrease (17.1%) when compared to T0, so the stock markets improve.

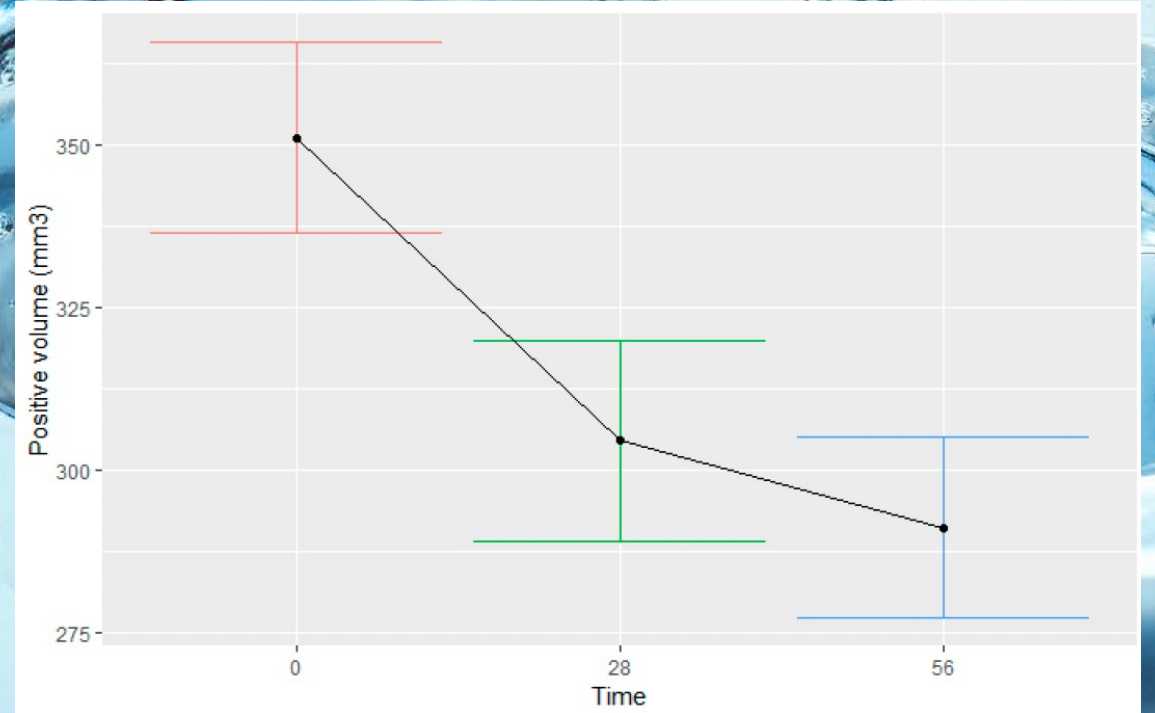


Figure 9. Average result of the parameter \pm standard error at each experimental time. The trend of the data over time is visualized.

02.3 Dark circles photos



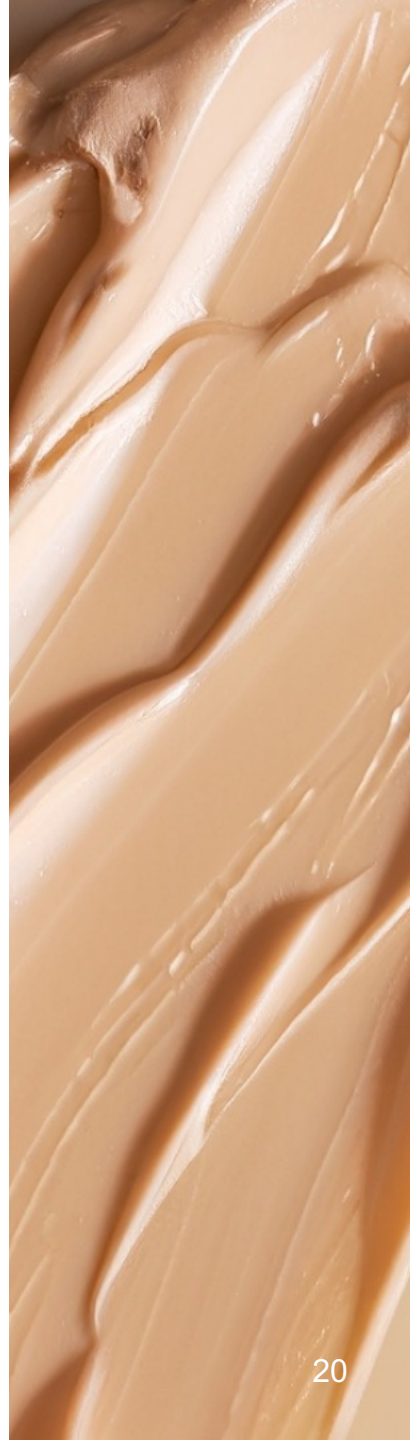
T0



T28



T56



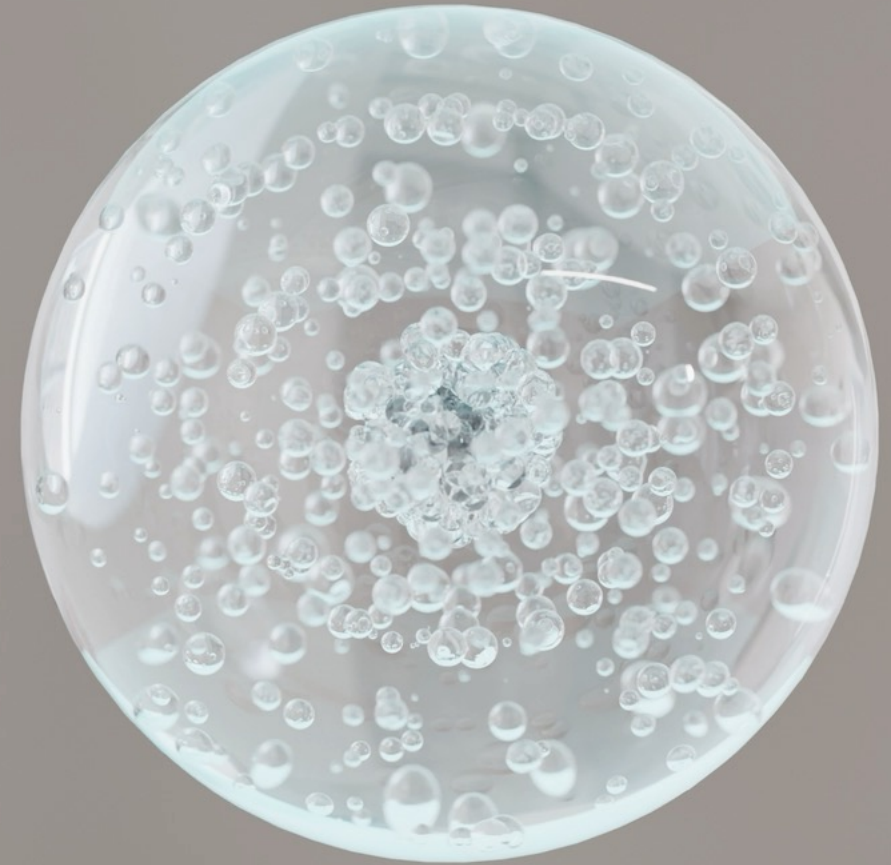
03

Conclusion

03

Conclusion

The objective of the study was to determine the anti-dark circles efficacy of the **EYE CONTOUR CREAM** cosmetic product, with reference: **001**, by means of biometric measurements in 22 volunteers with purple dark circles and eye bags, after 56 days of using the product.



03

Conclusion

Under the experimental conditions adopted and considering the defined experimental parameters, we can conclude:

Regarding the tolerance assessment carried out by the dermatologist:

- One volunteer (V9) presented burning in the eyelids for half an hour after each application. This event probably has a causal relationship with the use of the product (there is evidence to suggest a causal relationship and the influence of other factors is unlikely).

Regarding dermatological efficacy:

- After 28 days of continuous use of the product, there is a decrease in dark circles under the eyes of 2%.
- After 56 days of continuous use of the product, there is a 4% reduction in dark circles under the eyes.



03

Conclusion

Under the experimental conditions adopted and considering the defined experimental parameters, we can conclude:

Regarding instrumental efficacy:

Firmness

- After 20 minutes of product application, there is a 16% increase in firmness.
- After 2 hours after application of the product, there is a 13% increase in firmness.
- After 4 hours of product application, there is a 10% increase in firmness.

Elasticity

- After 20 minutes of product application, there is a 20% increase in elasticity.
- After 2 hours after application of the product, there is a 16% increase in elasticity.
- After 4 hours after application of the product, there is a 22% increase in elasticity.



03

Conclusion

Under the experimental conditions adopted and considering the defined experimental parameters, we can conclude:

Moisturizing

- After 20 minutes after application of the product, there is a 0.3% increase in hydration.
- After 6 hours after application of the product, there is a 5% increase in hydration.
- After 24 hours of product application, there is a 3% increase in hydration.
- After 28 days of continuous use of the product, there is a 5% increase in hydration. After 56 days of continuous use of the product, there is a 4% increase in hydration.

Luminosity

After 28 days of continuous use of the product, there is a 2% increase in luminosity.

After 56 days of continuous use of the product, there is a 5% increase in luminosity.

Coloration

o After 28 days of continuous use of the product, there is a decrease in coloration of 9%.

o After 56 days of continuous use of the product, there is a decrease in coloration of 11%.

03

Conclusion

Under the experimental conditions adopted and considering the defined experimental parameters, we can conclude:

Coloration (melanin)

After 28 days of continuous use of the product, there is a decrease in coloration of 12%.

After 56 days of continuous use of the product, there is a 14% decrease in coloration.

Coloration (melanin)

After 28 days of continuous use of the product, there is a 13% decrease in pockets.

After 56 days of continuous use of the product, there is a 17% decrease in bags.

The product can claim “**Tested under dermatological control**”.



04

Formulation



04 Formulation

Eye contour gel cream

Production Method

- **Mix the Phase A** components and shake until fully dispersed.
- **Mix the Phase B** components while shaking.
- **Add B to A** and homogenize with a Turrax until a gel cream is formed.
- **Add C** while shaking.

Ingredient	Inci	%	Phase
WATER	Aqua	84.5	A
FILMEXEL	Kappaphycus Alvarezii extract, Caesalpinia Spinosa Fruit Extract	0.5	A
ZEMEA	Propanediol	3	A
LECIGEL	Sodium polyacrylate, Lecithin	2	B
SAEMOL 99	Isononyl Isononanoate	3	B
DERMOSOFT OM	Methylpropanediol, Caprylyl glycol Grandiflorum seed butter	2	C
SCH SPECIAL EYES FLASH CONTOUR	Aqua, Pullulan, Polyglyceryl-6 caprylate, Polyglyceryl-4 caprate, Acetyl tetrapeptide-5, dipeptide-2, Acetyl hexapeptide-8, Acetyl octapeptide-3, Phytanadione epoxide, Methylpropanediol, Caprylyl glycol	5	C



Eyes Flash Contour

