

beauty • science • innovation

CELLBOOSTER® LIFT CELLBOOSTER® GLOW CELLBOOSTER® HAIR

CLINICAL EVIDENCE





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CELLBCOSTER®

CHAC TECHNOLOGY

CHAC Technology modifies and exploits the natural properties of Hyaluronic Acid (HA) making it an **optimal vehicle** for transporting essential nutrients to the skin, ensuring their **effective delivery** and **long-lasting results**.

This proprietary technology makes it possible to integrate biologically active ingredients onto HA macromolecules under conditions of mechano-stimulated reactions - **simultaneous pressure** and **shear deformation**. Specific bioactive components such as vitamins, and amino acids are **simultaneously integrated** and **uniformly distributed** onto the HA macro chains, **forming a large complex** that in essence represents a **unique macromolecular 'depot'** of biologically active material. As a result, multiple molecular complexes are formed.

These **molecular complexes** are based on supramolecular interaction between bioactive components and functional groups of HA, and unlike bioactive components **cannot be recognized by hyaluronidase**.



CHAC technology CELLBCOSTER® LIFT



CLINICAL STUDY

A prospective, open study on the safety and effectiveness of CELLBOOSTER® LIFT (stabilized booster complex using CHAC technology) on healthy subjects. Study conducted by EUROFINS in collaboration with Dr. Patricia Morel Mandrino (France) and Dr. Gabriel Siquier (Spain). Study led by Eurofins, independent laboratory (France).



CELLBCOSTER® LIFT -CLINICAL STUDY

INDICATIONS:

• Moderate skin depression, loss of firmness or laxity (facial tissue & contours)

• Fine lines & wrinkles

TREATMENT AREAS:

Epidermis and dermis of

• Face

• Neck

• Bodv

Decollete area

• Back of the hands

Internal face of the arms

- Dehydrated skin
- Visible dryness
- Loss of skin tone & microcirculation
- Atrophic scars, post acne, striae
- Couperose.
 - Lifts & Smoothes Wrinkles
 - Skin Redensification
 - Skin Tone & Microcirculation Improvement

METHODOLOGY:

Study design:

Prospective, monocentric, open, non comparative, postmarketing study designed to investigate the efficacy and safety of CELLBOOSTER® Lift on healthy female and male subjects (n=41) aged between 36 and 55 years old, with signs of cutaneous dryness on cheekbones and cutaneous aging on the face (wrinkles, skin laxity and dull skin).

Patient treatments and follow-up



Patient inclusion & disposition

- 41 healthy patients aged from 36 to 55 years old (mean 47.8 ± 4.95 yrs, 37 female and 4 male subjects) were included in the study to receive injections of CELLBOOSTER® Lift.
- All subjects included had hydration values (measured by Corneometer® at baseline) <60AU (mean ± SD = 44.81 ± 8.66 AU).

COMPOSITION:



STABILIZED REJUVENATING COMPLEX

Objectives:

Primary

 To evaluate CELLBOOSTER® Lift effectiveness on skin hydration improvement 2 weeks after the last treatment (considering a clinically relevant improvement with a change from baseline higher than 2 AU).

Secundary:

Primary

- To evaluate effectiveness on the improvement of skin quality by objective measurement of skin biomechanical parameters, density, hydration, microcirculation, wrinkles and colour, 2 and 8 weeks after the last treatment.
- To evaluate effectiveness on clinical Global Aesthetic Improvement, using the Global Aesthetic Improvement Scale (GAIS), evaluated by the investigator 2 and 8 weeks after the last treatment.
- To evaluate effectiveness on clinical Global Aesthetic Improvement, using the GAIS, evaluated by the subject 2 and 8 weeks after the last treatment.
- To evaluate the **satisfaction of the injectors and the subjects** using a subjective evaluation questionnaire 2 and 8 weeks after the last treatment.
- To illustrate aesthetic effect through 2D photography throughout the study period.
- To evaluate safety throughout the study period by Injection Site Reactions (ISRs) and adverse events (AEs) collection.

Assessments/endpoints



Safety Injection site reactions (ISRs) and adverse events (AEs) collection – Investigator & subjects

FAS (Full Analysis Set): n=41 (any subject included in the study with at least a post-basal value)
PP (Per Protocol) population: n=39 (any subject included in the study without major deviation)
Safety population: n=41 (any subject having used the tested device).

CELLBCOSTER® LIFT • RESULTS AT D42

A significant improvement in skin density



More rejuvenated cells such as fibroblasts => working the skin from the inside!

Significant increase in the proportion of echogenic signal (+0.06, +30%) 2 weeks after the last injection

A significant improvement in skin microcirculation



A better blood flow, and thus more oxygen & energy for the tissue!

Significant increase in skin microcirculation (perfusion units & capillary flux by >15 units (>37%)) 2 weeks after the last injection

A significant improvement in skin hydration (primary endpoint)

Moisture change (Corneometer®)

A significant improvement in skin moisture/hydration 2 weeks after the last injection

Changes in hydration value between D42 and baseline





A significant improvement in skin viscoelasticity parameter



A significant improvement in skin viscoelasticity 2 weeks after the last injection

Changes in skin viscoelasticity value between D42 and baseline



 $\begin{array}{l} \mbox{Statistically significant increase (+12.5\%) in skin viscoelasticity} \\ (p{=}0.0038) two weeks after the last injection \end{array}$



CELLBCOSTER[®] LIFT

RESULTS AT D42

A significant improvement in aesthetic rating

A significant improvement in skin microcirculation and capillary flux



A very high satisfaction and a statistically significant responder rate as rated by the investigators and the subjects 2 weeks after the last injection

CELLBOOSTER® Lift: a significant improvement in aesthetic rating

Very high satisfaction rates among included patients

Patient satisfaction and agreement regarding the improvement of their skin



A very high satisfaction of the subjects 2 weeks after the last injection

Subject Satisfaction



HIGH or VERY HIGH Patients SATISFACTION!



Patients SATISFACTION on all parameters!

« The treatment is good » « Hyo « Obtained results » « Firn

« Hydrated skin » « Firmer skin »



CELLBCOSTER® LIFT

A high satisfaction during injection sessions

Injectors appraisal on product features during the 3 injections



CELLBOOSTER[®] Lift: Injection Site Reactions (ISRs) and Adverse Events (AEs) appraisal

Injection site reactions* as reported by the investigators and the subjects



Safety endpoint - ISRs Investigators and subject report (ISRs collection) Proportion of patients presenting at least one sign of ISR during the clinical trial



 Most of the ISRs observed by the investigators and subjects were judged as being mild.

 None of the reported ISRs were considered as severe whatever the injection point.

 All ISRs reported by the subjects lasted from 1 to 3 days & disappeared 2 weeks after each injection session.

ISRs were considered as expected following an injection with a Class III medical device & resolved 2 weeks after the last injection

* ISRs reported by investigators and subjects were considered as expected after a Class III medical device injection and included Redness/Erythema, Pain/tenderness, Induration, Oedema, Lumps/Bumps, Bruising/Hematoma, Itching and Discoloration/Pigmentation.





CONCLUSION

A strong clinical trial that allows 2 weeks after a 3 injections protocol to observe that CELLBOOSTER® LIFT leads to:



With a well tolerated treatment

CHAC technology CELLBCOSTER® GLOW



HUMAN SKIN EXPLANTS STUDY

Anti-Aging and Depigmentation Effect of a Hyaluronic Acid Mechanically Stabilized Complex on Human Skin Explants. Gabriel Siquier-Dameto, Sylvie Boisnic, Pere Boadas-Vaello and Enrique Verdú. *Study Led by Gredeco, independent laboratory (France).*



CELLBCOSTER[®] GLOW

HUMAN SKIN EXPLANTS STUDY

Independent study conducted by GREDECO Laboratory (France), led Dr. Sylvie Boisnic to demonstrate the **depigmenting** and **anti-aging efficacy** of CELLBOOSTER® Glow injected into the dermis of human skin maintained in survival.



STABILIZED REVITALIZING COMPLEX

METHODOLOGY:

In the present study, skin samples from four female donors between 29 and 57 years of age have been used. **The depigmenting effect** was analyzed on native skin after 12 days.

For this purpose, CELLBOOSTER[®] Glow injections were performed at D0 in the superficial dermis and the upper part of the middle dermis.

The 2 following conditions were compared in duplicate for each donor: control skin versus CELLBOOSTER® Glow.

The anti-ageing effect of the products was analyzed in a UV ageing model.

For this purpose, an oxidative stress with UVA and UVB doses was carried out at D0.

After UV session, CELLBOOSTER[®] Glow injections were performed in the superficial dermis and the upper part of the middle dermis.

For anti-aging effect, 2 series of culture were made at D4 (MMP1 analysis, GAGs assay) and D12 (procollagen and elastin).

The 3 following conditions were compared in duplicate for each donor: control skin *versus* UV versus UV + CELLBOOSTER® Glow.

CONCLUSION:

In an experimental aging model by ultraviolet (UV) on human skin maintained in survival condition, an anti-ageing effect was obtained after injection of CELLBOOSTER[®] Glow with an increase of **47.9% pro-collagen type I**, 25.3% elastin and 22.4% sulfated Glycosaminoglycannes (GAGs).

Depigmenting effect of CELLBOOSTER[®] Glow was also shown with a significant decrease of cell number with important pigmentation.



Fontana staining x 400

Histogram of the percentage of cells with low (score 1), medium (score 2) and high (score 3) melanin content in both experimental groups (Control, CBG). Values are mean \pm standard deviation (n = 8 values). * p < 0.05 compared to the control group.







Control skin 1

Control skin 2

Elastin (Hg/mg)



Skin 1 after injection with CELLBOOSTER® Glow



Skin 2 after injection with CELLBOOSTER® Glow







The elastin synthesis is significantly increased by 25.3% after injection of CELLBOOSTER® Glow in comparison with UV condition.

GREDECO



After injection of CELLBOOSTER® Glow, a significant increase of sulfated glycosaminoglycans by 22.4% was obtained in comparison with UV condition.



CELLBCOSTER[®] GLOW

Discover the full scientific article published in the renowned Polymers Journal: Anti-Aging and Depigmentation Effect of a Hyaluronic Acid Mechanically Stabilized Complex on Human Skin Explants by Gabriel Siquier-Dameto, Sylvie Boisnic, Pere Boadas-Vaello and Enrique Verdú.



NEW ARTICLE

Anti-Aging and Depigmentatio Effect of a Hyaluronic Acid Mechanically Stabilized Complex on Human Skin Explants



Scan to read the full article:



Polymers 2023, 15, 2438. https://doi.org/10.3390/polym15112438

CHAC technology CELLBCOSTER® HAIR



CLINICAL TRIAL

Results of the clinical trial on 26 healthy subjects treated with CELLBOOSTER® HAIR (stabilized booster complex using CHAC technology). Fighting hair loss & Strengthening hair follicles to improve hair density and quality. *Trial led by Gredeco, independent laboratory (France)*.



CELLBCOSTER® HAIR

INDICATIONS:

• Non cicatricial alopecia,

- Alopecia areata,
- Androgenic alopecia,
 Damaged hair shaft (brittle, dull
- color, split ends), • Premature graying,
- Seborrhea, psoriasis.

Epidermis and dermis of the scalp (near hair roots according to the mesotherapy applied technique).

TREATMENT AREAS:

COMPOSITION:



Accelerates hair growth,

✓ Nourishes the scalp and fortifies follicles,

 \checkmark Prevents hair loss and graying.

METHODOLOGY:

Study purpose:

The objective of this study was to clinically assess the effect on hair density and hair quality after 6 sessions of CELLBOOSTER® HAIR injections on 26 healthy subjects, equally shared between men and women.

Patient treatments and follow-up & assessments



ASSESSMENTS:

Hair quality clinical analysis:

- ✓ Thickness
- Shine
- 🗸 Hair loss

Hair density & thickness improvement:

✓ Scoring on macrophotography with Proscope x30

Hair shine

Measurement with Glossymeter

Effect of the product:

✓ Scalp photographies by LifeViz 2D mini[®]

Subject satisfaction (self assessment) and GAIS (global aesthetic improvement scale)

Tolerance:

- ✓ Check of the absence of undesirable events at each visit.
- Each adverse event was reported within 48 hours and was included in the study report.

CELLBCOSTER® HAIR

INCLUSION CRITERIA

General criteria:

- ✓ Subjects able to follow the trial procedures.
- Subjects giving their free and written consent after oral and written information about the study.

Specific criteria:

- ✓ Women or men, age over 18 years old.
- For men, qualification by the Norwood-Hamilton scale: class
 2a, 3, 3a or 3a vertex.





✓ For women, qualification by the Ludwig scale: type 1 or 2



- Women agreed to perform a pregnancy test (for women who can procreate a pregnancy test will be performed before each injection).
- ✓ Low to moderate capillary density.
- Subject not using care (topical or systemic) intended for hair growth/improvement.
- Subject agreeing not to be exposed to the sun for the duration of the study.

PRINCIPAL EXCLUSION CRITERIA - SUBJECTS WITH:

General criteria:

- Currently participating in another clinical study related to pharmaceuticals or medical devices or subject in a period of exclusion from a clinical study.
- ✓ Facial injections/implants of any non-absorbable filler in his or her lifetime.
- ✓ Pregnant or lactating woman.
- ✓ Often exposed to the sun or UV during the last 15 days.

Allergies & inflammatory condition or other risk of infections:

- History of multiple severe allergies or anaphylactic shock.
- Known hypersensitivity to hyaluronic acid or to chlorhexidine.
- / Tendency to develop inflammatory skin reactions or hypertrophic scars.
- An inflammatory skin reaction on or near the area to be treated (according to the opinion of the investigator).
- ✓ History of streptococcal disease (recurrent angina, rheumatic fever).
- Skin pathology, or an acute inflammatory reaction or bacterial or viral infection, at the study area level, or seen 6 weeks after the end of such an episode.
- Epilepsy not controlled by treatment.
- General pathology, skin pathology, dermatosis, acute or chronic systemic disease, and/or taking general or topical treatment that in the opinion of the investigator may interfere with the treatment or compromise the subject's participation in the study.
- ✓ Dermatological diseases that can reach the scalp (for example: pelade or lichen planus).
- Endocrine disruption mainly affecting the thyroid and more specifically hypothyroidism.

Concomitant treatments:

- ✓ Oral/injectable corticosteroid (or not stopped for ≥ 3 months). Inhaled corticosteroids are allowed as well as topical corticosteroid therapy not involving study areas.
- ✓ Concomitant treatment (or not stopped for ≥ 1 year) of immunosuppressant or chemotherapy - A history of less than 12 months of radiation therapy at the study area level or of autoimmune pathology or connective tissue.
- Aspirin or anti-coagulants in regular doses during the past 15 days.

CLINICAL EVALUATION RESULTS

3 weeks after the injection protocol (6 treatments)

Hair thickness (scoring 0 to 3) Clinical evaluation - ± SD (n=26)

Hair loss (scoring 0 to 3) – Clinical evaluation - ± SD (n=26)

Hair shine (scoring 0 to 3) – Clinical evaluation - ± SD (n=26)

CELLBOOSTER® Hair: for more hair strenght and resistance



Changes in hair thickness before, during and after the injection protocol (6 treatments)



A continuous & additive improvement in hair STRENGHT after injections of CELLBOOSTER® Hair with a more and more SIGNIFICANT & beneficial effect

CELLBOOSTER® Hair: for significantly less loss



Changes of hair loss assessed by clinical score by the subjects



CELLBOOSTER® Hair for a SIGNIFICANT reduction of hair loss After 3 injections and even more after a full protocol of 6 injections

Changes of hair shine assessed by clinical

CELLBOOSTER® Hair: for shiny hair

Clinical evaluation



CELLBOOSTER® Hair for more shiny and beautiful hair with a SIGNIFICANT benefit after 6 injections

CELLBCOSTER[®] HAIR

BIOMETRIC EVALUATION RESULTS 3 weeks after the injection protocol (6 treatments)

CELLBOOSTER[®] Hair: a confirmation of the improvement of hair thickness by Proscope X30





A biometric confirmation of hair THICKNESS improvement with CELLBOOSTER® Hair with a SIGNIFICANT benefit after a full protocol (6 injections)

CELLBOOSTER® Hair: for more density



Macrophotography (Proscope X30)

Hair density (scoring 0 to 18) – 4acrophotography - ± SD (n=26)

Hair shine – gloss unit (DSC) ± SD (n=26) Changes of hair density assessed by Proscope X30



CELLBOOSTER® Hair for more DENSITY of the hair in all assessed areas (posterior & middle central line, vertex, occiput, left & right temple) with a SIGNIFICANT benefit after 3 injections and an even more pronounced effect after a full protocol (6 injections)

CELLBOOSTER[®] Hair: a confirmation of the improvement of hair shine by glossymeter



Changes of hair shine assessed by glossymeter



A biometric confirmation of hair SHINE improvement with CELLBOOSTER® Hair with a SIGNIFICANT benefit after a full protocol (6 injections)

A very high satisfaction of the subjects regarding the benefits of CELLBOOSTER® Hair

96% 88% "MY HAIR CONDITION "MY HAIR IS GLOBALLY IMPROVED" REDUCED"

LOSS IS

88% "MY HAIR IS DENSER"

"MY HAIR IS THICKER

84% 77% 65% "MY HAIR IS SHINIER"

D0

D0

"MY HAIR **GROWTHS BACK** FASTER"

*(% of patients who "completely agree" or "rather agree" on quality of their hair – answer gathered with a self questionnaire)

D0





D90



D40

D90

D90

A very high satisfaction of the subjects regarding the benefits of CELLBOOSTER® Hair







88% "I WOULD RECOMMEND THE TREATMENT TO MY FRIENDS"



CONCLUSION

Results 3 weeks after the injection protocol (6 treatments)

A strong clinical trial that allows 3 weeks after a 6 injections protocol to observe that CELLBOOSTER® Hair leads to:



CELLBCOSTER[®] HAIR

CONCLUSION

Results 3 weeks after the injection protocol (6 treatments)

A very high patient satisfaction



With a dermatological tolerance that was judged by the investigators as being Excellent for the 26 patients.

suisse

CELLBOOSTER®

CELLBOOSTER[®] is a **Swiss made injectabl** Four unique stabilized complexes composed of



NO CHEMICAL • SAF BINDING AGENTS DIM

SAFE & MAJOR SIDE EFFECT RISK
 DIMINISHED



SLOW RELEASE OF • EFFE ACTIVE INGREDIENTS RESU

LIFT



- Moderate skin depressions, loss of firmness in factial tissues & contours
- Loss of skin tone & microcirculation
- Couperose, atrophic scars, post-acne, striae
- Dehydrated skin, fine lines, wrinkles

GLOW



- Hyperpigmentation.
- Uneven skin tone
- Sun-damaged and enviroment compromised skin
- First sign of ageing, fine lines, wrinkles
- Dry skin.

STABILIZED REJUVENATING COMPLEX

CHAC Technology

- HYALURONIC ACID 18mg (6mg/ml)
- Amino acids: ARGININE, GLYCINE, LYSINE, PROLINE, VALINE
- Vitamins: RIBOFLAVIN (B2), SODIUM AS-CORBYL PHOSPHATE (C), TOCOPHEROL (E), BIOTIN

STABILIZED REVITALIZING COMPLEX

CHAC Technology

- HYALURONIC ACID 18mg (6mg/ml)
- Amino acids: CYSTEINE, GLUTATHIONE, GLYCINE, LYSINE, PROLINE, VALINE
- Vitamins: SODIUM ASCORBYL PHOSPHATE (C), BIOTIN

>

Intensive course:

Support course:

3 treatments with 2-3 weeks interval

1 treatment per month

selle

R[®] AT A GLANCE

table boosters (Class III Medical Device). d of hyaluronic acid, amino acids, and vitamins:

• EFFECTIVE & LONG-LASTING RESULTS



UNIQUE COMPLEX INGREDIENTS COMBINATION

- COVERS MULTIPLE INDICATIONS WITH ONE PRODUCT
- CELLBOOSTER® PRODUCTS CAN BE COMBINED IN THE SAME TREATMENT

SHAPE



- Local fat accumulation
- Double chin
- Cellulite

n

- Puffiness, edema
- Cheeks & eye bags
- Sagging skin

STABILIZED RESHAPING COMPLEX

CHAC Technology

- HYALURONIC ACID 18mg (6mg/ml)
- Amino acids: L-CARNITINE
- Vitamins: SODIUM ASCORBYL PHOSPHATE (C)

HAIR



- Non cicatricial alopecia
- Alopecia areata
- Damaged hair shaft (brittle, dull color, split ends)
- Premature graying
- Seborrhea, psoriasis

STABILIZED STRENGTHENING COMPLEX

CHAC Technology

- HYALURONIC ACID 18mg (6mg/ml)
- Amino acids: ARGININE, CYSTEINE, GLUTAMINE, GLYCINE, LYSINE
- Vitamins: NIACIN, PANTOTHENIC ACID (B5), PYRIDOXINE (B6), BIOTIN (B7), CYANOCOBALAMIN (B12), RUTIN
- Copper Gluconate, Zinc carbonate

Intensive course:

6 treatments with 2-3 weeks interval

1 treatment per month

Support course:



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