



Exometics™ G

**Vegan Biomimetic Exosomes**  
for Total Skin Renewal

Exometics™ G

# The Future of Medicine is Regenerative

## Exosomes Lead the Way

**Exosomes are emerging as a key tool in regenerative medicine, delivering unparalleled repair and renewal at the cellular level. Once limited to medical use, they are now finding a place in advanced skincare.**

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Google Trends  
exosome  
Search Term

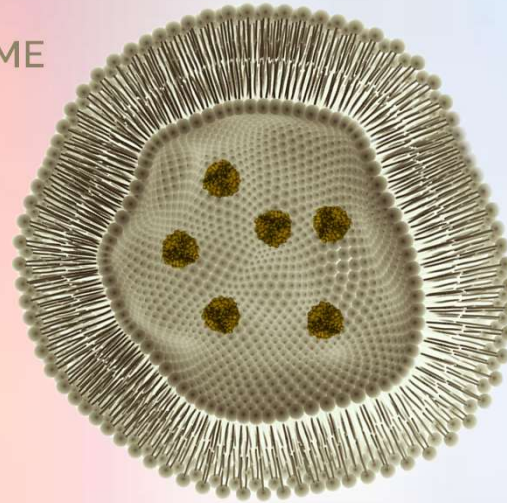


# Exosomes, Yes! But Why?

## Beyond Delivery: Bio-Communication

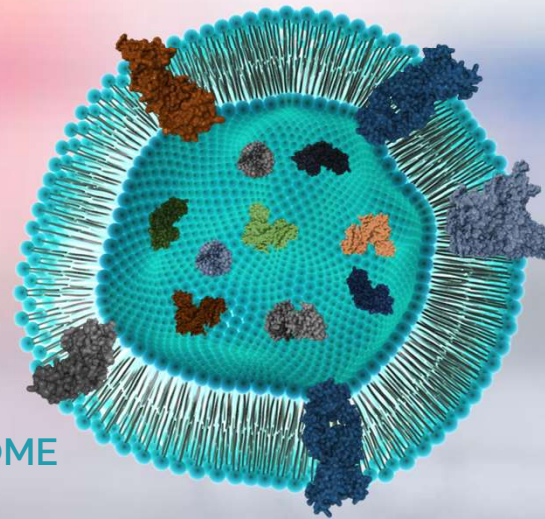
**Traditional liposomes are passive carriers—they encapsulate actives but lack biological activity. Exosomes, on the other hand, are intelligent bio-communicators that naturally interact with skin cells.**

LIPOSOME



- ✓ Mono-lipid bilayer (lecithins)
- ✓ "Naked" vesicles
- ✓ Encapsulate defined actives
- ✓ Passive carriers

EXOSOME



- ✓ Complex, cell-like lipid bilayer
- ✓ Surface structures for cell targeting
- ✓ Rich blend of regeneration signals
- ✓ Actively interacts with cells

# The Need for Vegan Alternatives

## Rethinking Exosome Sourcing

**Animal-derived exosomes dominate the therapeutical space due to their regenerative potential, but their use in skincare faces significant limitations.**

**100% Vegan and  
Cruelty-Free**

**Sustainably and  
Ethically Sourced**

**True Exosomal  
Structure and  
Functionality**

**Self-assembled  
(no lecithin  
needed)**

**Scalable and  
Consistent  
Production**

### Animal-Derived Exosomes



(Human/Animal  
Derived)



(Ethical Concerns)



(High Cost and  
Variability)

**We need a next-generation alternative—one that delivers the power of exosomes without the ethical, regulatory, and consumer concerns.**

# How Do Alternatives Compare?

## Current Landscape

With the rise of exosome-inspired skincare, not all solutions are created equal. From sourcing to performance, key differences set vegan biomimetic exosomes apart.

**100% Vegan and Cruelty-Free**

**Sustainably and Ethically Sourced**

**True Exosomal Structure and Functionality**

**Self-assembled (no lecithin needed)**

**Scalable and Consistent Production**

### Animal-Derived Exosomes

✗  
(Human/Animal Derived)

✗  
(Ethical Concerns)

✓

✓

✗  
(High Cost and Variability)

### Natural Vegan Exosomes

✓

✗  
(Limited Yield)

✓

✓

✗  
(Low Scalability and High Variability)

### 'False' Vegan Exosomes (exosome-like)

✓

✓

✗  
(‘Naked’ Liposomes)

✗  
(Artificially Assembled by Adding Lecithins)

✓

### Vegan Biomimetic Exosomes

✓

✓

✓

✓

✓

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# Exometics™: Vegan Biomimetic Exosomes

Bridging Nature and Biotech

**Microalgae Biomimetic Exosomes** are lab-created exosomes that replicate the structure, composition, and functionality of natural plant exosomes without relying on animal or plant harvesting.

**Vegan and Naturally Safe:** A clean, cruelty-free solution with vegan bioactive compounds that deliver proven skin benefits.

**Highly Potent:** Powered by microalgae's stem cell-like metabolism, offering unmatched efficacy and multifunctional performance.

**Unlimited, Consistent Supply:** Lab-cultivated for scalability, reliability, and sustainability—no reliance on natural or seasonal harvesting.

**Controlled Composition:** Engineered to eliminate variability, impurities and optimize functionality, ensuring precise and safe formulations.

**Unmatched Replicability:** Advanced microalgae biotechnology delivers consistent, high-quality exosomes with every batch.



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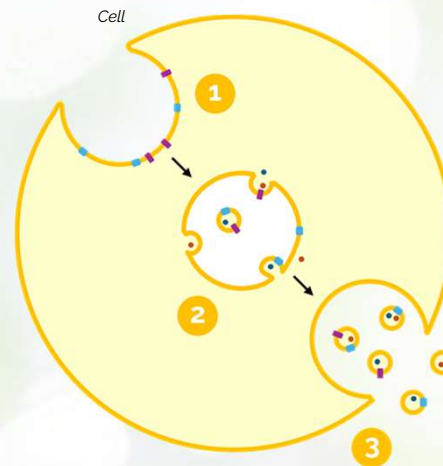
# Patented Biomimetic Innovation

Bridging Nature and Biotech

**Exometics™ bioengineering process overcomes all sourcing and regulatory limitations, delivering unmatched skincare performance through its patented biomimetic process.**

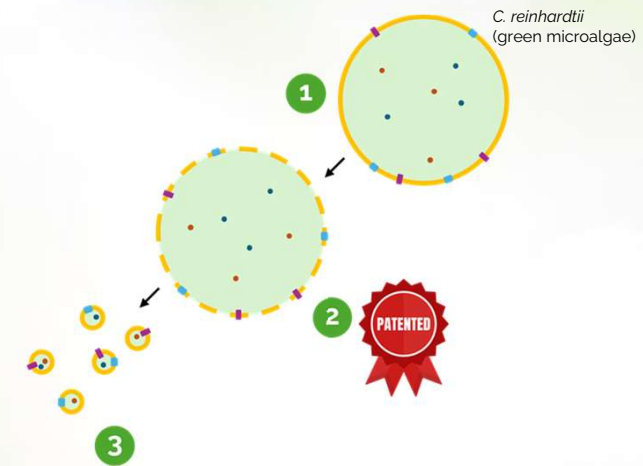
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## NATURAL EXOSOMES



- 1 First Endocytosis
- 2 Exosomes Formation in Endosome
- 3 Exosomes Release

## EXOMETICS™ G



- 1 Harvested Microalgae Cell
- 2 Membrane Disruption and Rearrangement
- 3 Biomimetic Exosomes Formation



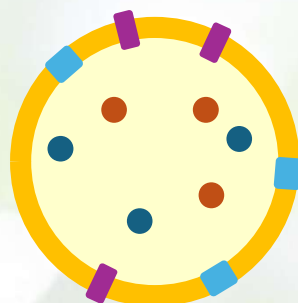
# Exometics™ G: Structural Biomimeticism

Bridging Nature and Biotech

Powered by Green microalgae's stem cell-like biology, Exometics™ G mirror the natural composition and functionality of human exosomes, ensuring consistent and reliable performance.

## HUMAN EXOSOMES

30 - 200  
nm  
diameter



## LIPID BILAYER MEMBRANE

Phosphatidylethanolamine  
Phosphatidylglycerol  
Ceramides  
Cholesteryl Ester  
Triacylglycerol  
N-acyl Ethanolamines

## LIPID RAFTS

Sphingolipids

## TRANSMEMBRANE PROTEINS

FAS1  
Transmembrane 9 SF

## EXOSOME BIOGENESIS PROTEINS

HSP 60, 70 & 90  
Clathrin  
RAS-23  
ALIX (BRO-1)  
RAB1A, 6 & 18

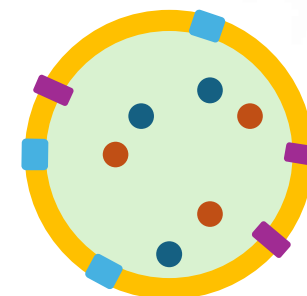
## FUNCTIONAL CARGO PROTEINS

Antioxidant enzymes  
Growth Factors  
DNA repair enzymes

## EXOMETICS™ G

150 nm  
diameter

17.7  
billion  
vesicles/  
mL



109 lipids  
identified

1369  
proteins  
identified

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# Exometics™ G: Functional Biomimeticism

COMING SOON

**In vitro array study comparing the  
metabolical action of Exometics™ G  
vs Human Fibroblast-derived  
Exosomes.**

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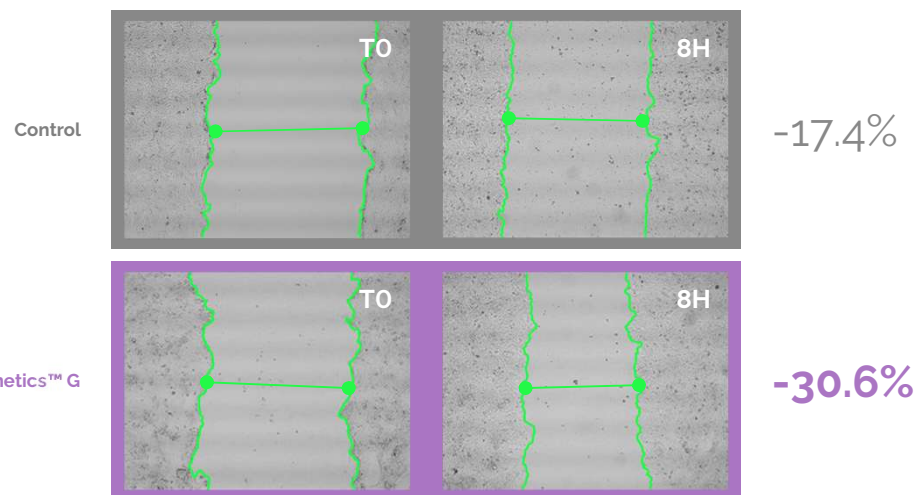
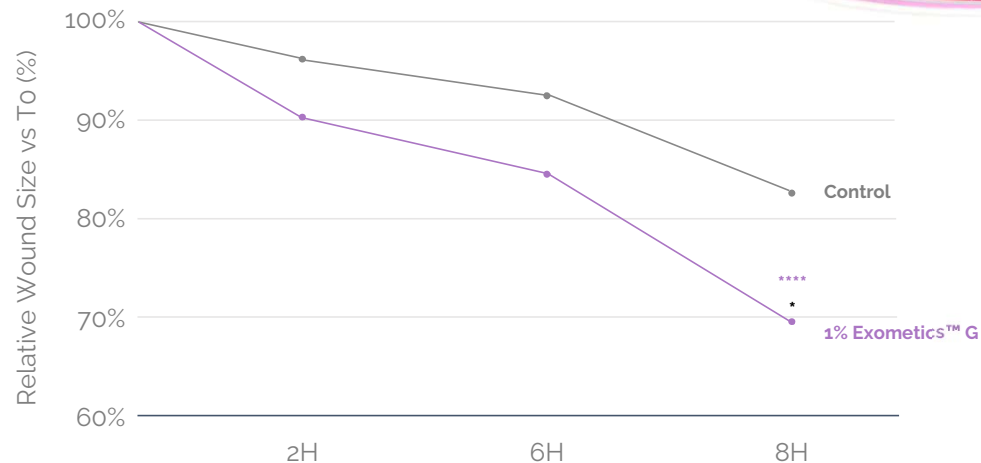
# Deep Skin Regeneration

## In vitro Efficacy

Transform damaged skin by teaching cells to heal faster and more effectively—proven by in vitro wound healing testing.

In vitro study: Human fibroblast were cultured and a wound was created. Wound healing was monitored at 0, 2, 6, and 8 hours by imaging. The distance between wound margins was measured using ImageJ software. \* $p < 0.01$  vs Control; \*\*\*\* $p < 0.0001$  vs T0.

### Wound Size in Fibroblasts



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### Clinical Study 1: ONGOING

- 40 female volunteers (35-55 y.o.), hemi face vs placebo, twice a day application, 56 days
- 2% Exometics™ G cream
- Testing Parameters:
  - **Wrinkle Reduction & Smoother Skin**
  - **Dark Spot Reduction & Even Skin Tone**
  - **Improved Skin Elasticity & Firmness**
  - **Skin Radiance**
  - **"Younger-Looking" Skin (AI-powered)**
  - **Contoured & Reshaped Facial Lines**
  - **Skin Texture and Structure (Isotropy)**
  - **Enhanced Dermal Fiber Density (LC-OCT)**

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# Erasing Wrinkles for a Youthful Glow

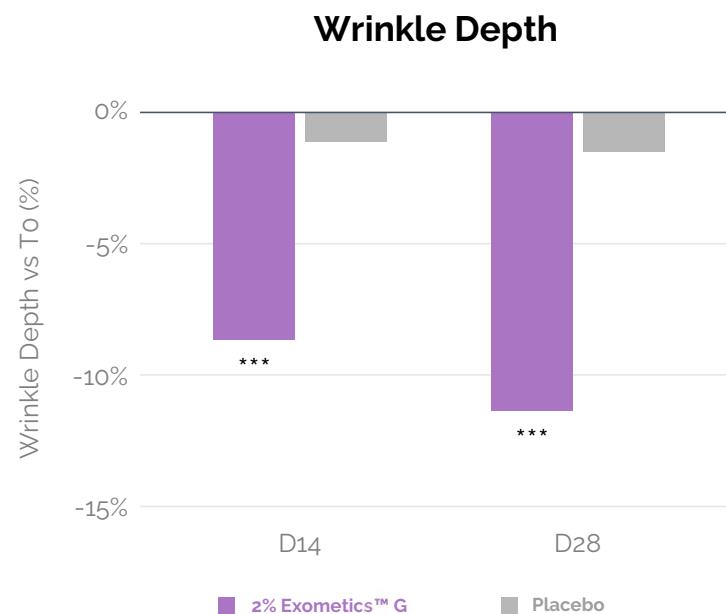
## Clinical Efficacy

Targets wrinkles with precision, boosting skin's natural resilience and restoring youthful smoothness for a visibly refined complexion.

Relative wrinkle depth reduction vs T0 measured by skin profilometry (Primos-CR SF) in the periorcular area.

\*\*\* p<0.001 vs placebo

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# Erasing Wrinkles for a Youthful Glow

## Clinical Efficacy

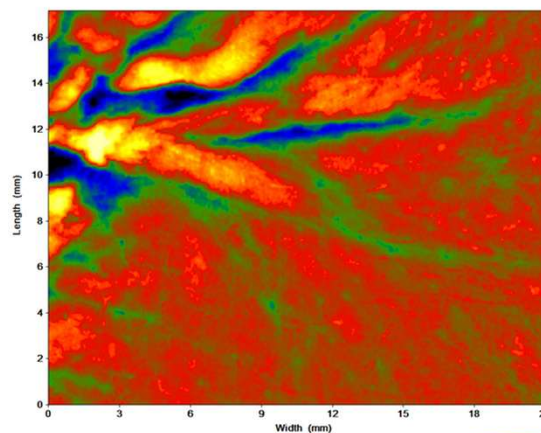
Targets wrinkles with precision, boosting skin's natural resilience and restoring youthful smoothness for a visibly refined complexion.

Volunteer 26. Pictures made by skin profilometry (Primos-CR SF) in the periocular area. \*The "younger skin" effect was evaluated by assessing the reduction in periocular wrinkle depth over time on all volunteers. The Primos-CR SF results were compared against a biological age reference curve derived from the dermatological laboratory archives, mapping wrinkle depth against age in women aged 30–70.

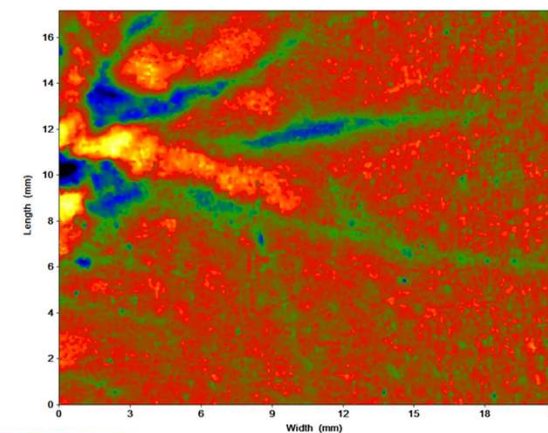
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DAY 0



DAY 14



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# Erasing Wrinkles for a Youthful Glow

## Clinical Efficacy

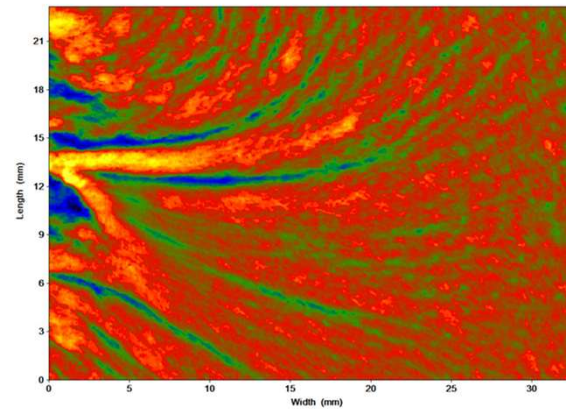
Targets wrinkles with precision, boosting skin's natural resilience and restoring youthful smoothness for a visibly refined complexion.

Volunteer 30. Pictures made by skin profilometry (Primos-CR SF) in the periocular area. \*The "younger skin" effect was evaluated by assessing the reduction in periocular wrinkle depth over time on all volunteers. The Primos-CR SF results were compared against a biological age reference curve derived from the dermatological laboratory archives, mapping wrinkle depth against age in women aged 30–70.

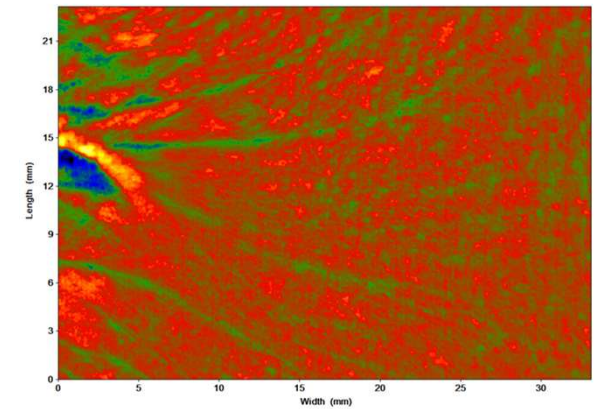
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DAY 0



DAY 14



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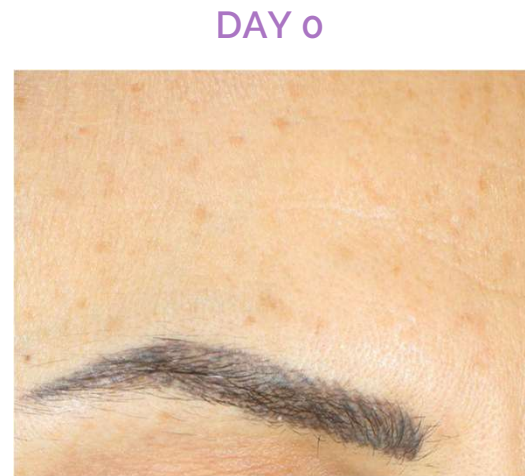
# Erasing Wrinkles for a Youthful Glow

## Clinical Efficacy

Targets wrinkles with precision, boosting skin's natural resilience and restoring youthful smoothness for a visibly refined complexion.

Volunteer 27. Digital Pictures of the forehead made by Visia®-CR.  
\*The "younger skin" effect was evaluated by assessing the reduction in periocular wrinkle depth over time on all volunteers. The Primos-CR SF results were compared against a biological age reference curve derived from the dermatological laboratory archives, mapping wrinkle depth against age in women aged 30-70.

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# Lifting and Firming for Resilient Skin

## Clinical Efficacy

Stimulates skin's natural regeneration, reinforcing its tone and structure for a firmer, more defined face contour.

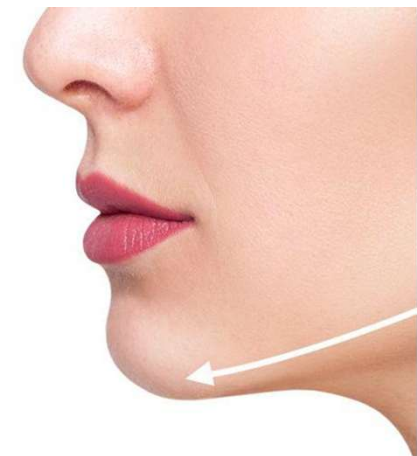
Data represents the mean of three measurements in the jawline area ( $\mu\text{m}$  vs. T0), captured via VISIA®-CR. A reduction of the distance indicates a lifting & reshaping effect, assessed using morphometric image analysis.

\*\*\*  $p < 0.001$  vs placebo; \*  $p < 0.05$  vs T0; \*\*\*  $p < 0.001$  vs T0.

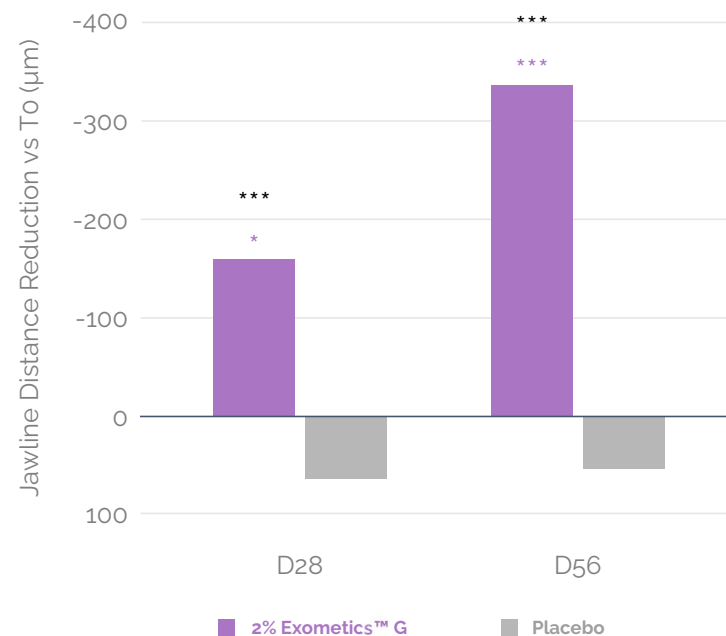
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boosts  
**+229%**  
**Firmness**  
vs Placebo\*\*\*  
in 28 Days

boosts  
**+311%**  
**Elasticity**  
vs Placebo\*\*\*  
in 28 Days



## Lifting Effect



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# Achieving Smooth, Flawless Skin

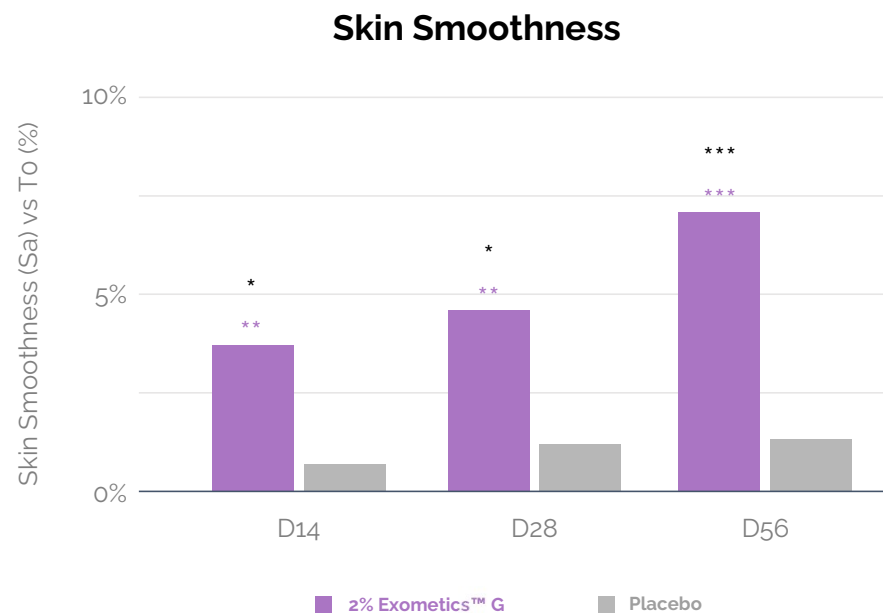
## Clinical Efficacy

Refines skin texture by supporting natural cell renewal, leaving the surface velvety soft, radiant, and visibly rejuvenated.

Relative surface roughness (Sa parameter) reduction vs To measured by skin profilometry (Primos-CR SF).

\*  $p < 0.05$  vs placebo; \*\*\*  $p < 0.001$  vs placebo; \*\*  $p < 0.01$  vs To; \*\*\*  $p < 0.001$  vs To.

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# Achieving Smooth, Flawless Skin

## Clinical Efficacy

Refines skin texture by supporting natural cell renewal, leaving the surface velvety soft, radiant, and visibly rejuvenated.

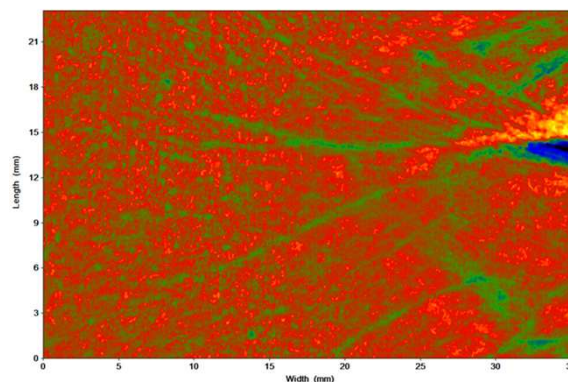
Volunteer 29. Surface roughness measured by skin profilometry (Primos-CR SF) in the periocular area.

Skin isotropy index measured by Primos-CR SF. An increase of skin isotropy index is indicative of an improvement of skin uniformity (smoothness).

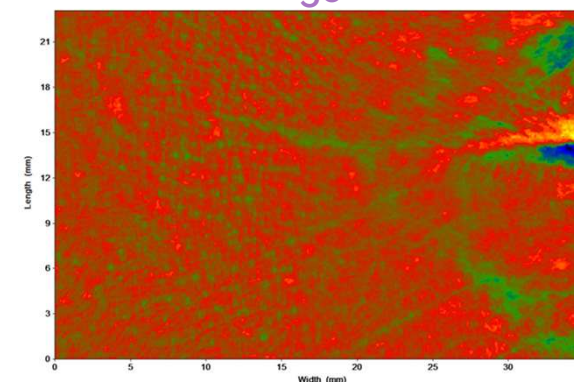
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DAY 0



DAY  
56



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# Illuminating Skin from Within

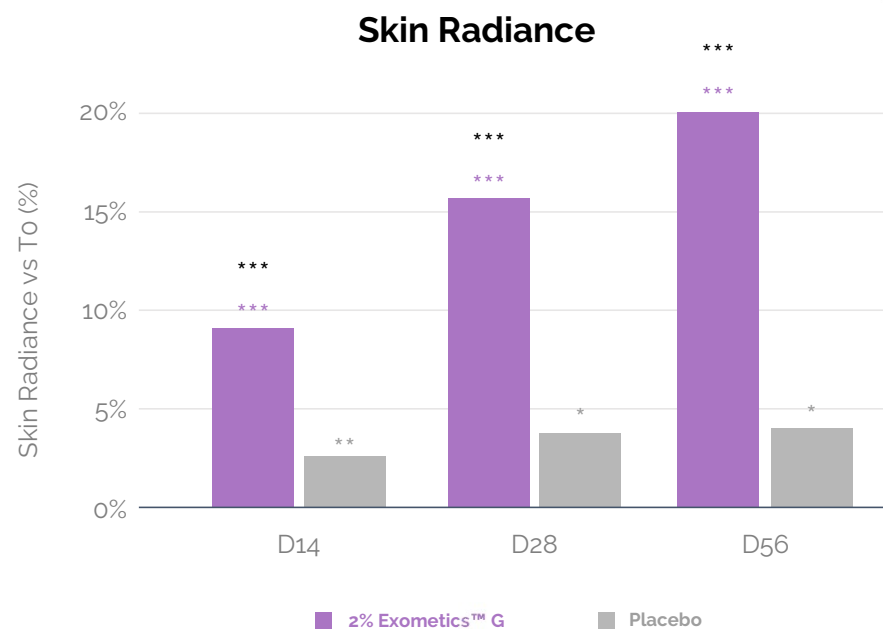
## Clinical Efficacy

Boosts the skin's natural luminosity, revealing a vibrant, healthy glow that radiates vitality and youthfulness.

Relative skin radiance (gloss parameter) improvement vs T0 measured by Glossmeter.

\*\*\* p<0.001 vs placebo; \*\*\* p<0.001 vs T0; \*p<0.05 vs T0; \*\* p<0.01 vs T0.

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# Fading Spots for an Even Complexion

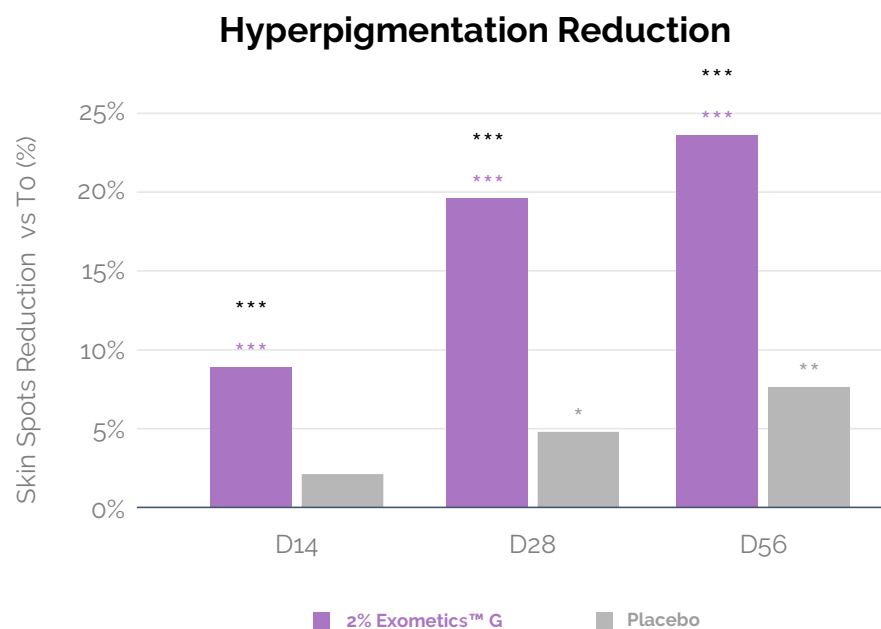
## Clinical Efficacy

Visibly reduces the appearance of hyperpigmentation, promoting a balanced, uniform skin tone for a brighter, flawless look.

Relative hyperpigmentation (ITA<sup>®</sup>) reduction vs T<sub>0</sub> measured by Colorimeter.

\*\*\* p<0.001 vs placebo; \*\*\* p<0.001 vs T<sub>0</sub>; \*p<0.05 vs T<sub>0</sub>; \*\* p<0.01 vs T<sub>0</sub>.

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# Fading Spots for an Even Complexion



## Clinical Efficacy

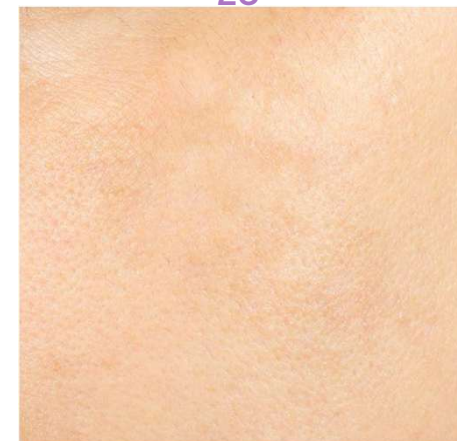
Visibly reduces the appearance of hyperpigmentation, promoting a balanced, uniform skin tone for a brighter, flawless look.

Volunteer 4. Digital pictures of the cheek made by Visia®-CR.

DAY 0



DAY  
28



The background of the image is a microscopic view of numerous green, spherical, porous structures. These structures have a complex, interconnected network of fibers forming a mesh-like or sponge-like appearance. They are set against a bright, out-of-focus background with soft bokeh light spots. The overall color palette is various shades of green, from light lime to deep forest green.

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**Vegan Biomimetic Exosomes**  
for Total Skin Renewal

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IDENTIFICATION	SPECIFICATIONS
<p><b>Ingredient List (Global):</b> Water (and) Propanediol (and) Chlamydomonas Reinhardtii Extract (and) Polyglyceryl-4 Caprate</p> <p><b>CAS #:</b> 7732-18-5, 504-63-2, 160391-93-5</p> <p><b>EC #:</b> 231-791-2, 207-997-3</p>	<p><b>Appearance:</b> Colorless to pale yellow liquid</p> <p><b>Solubility:</b> Water-soluble</p> <p><b>Preservation free</b></p>
FORMULATION	TOXICOLOGY
<p><b>Tested level:</b> 1%-2%</p> <p><b>Guidelines:</b></p> <ul style="list-style-type: none"><li>· Add below 40° C, at the end of the process</li><li>· ph Range: 4.5 - 7.5</li><li>· Avoid intense agitation or mixing</li></ul>	<ul style="list-style-type: none"><li>· Not cytotoxic</li><li>· Not irritant to the eye</li><li>· Not phototoxic</li><li>· Not irritating</li><li>· Not sensitizing</li></ul>

## CERTIFICATIONS

