

The First **Three Dimensional Niosome** System  
for **Botox-Like Wrinkles Solution**

# NIO-OLIGO 3<sup>D</sup>

## NIOSOME TECHNOLOGY

*LMW Hyaluronic Acid*



*VLMW Hyaluronic Acid*



*ULMW Hyaluronic Acid*



Skin Smoothness +47%

Wrinkle Number -41%

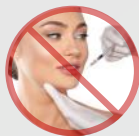
Main Wrinkle Length -25%

# THE 3<sup>D</sup> SYSTEM FOR BOTOX-LIKE WRINKLE SOLUTION

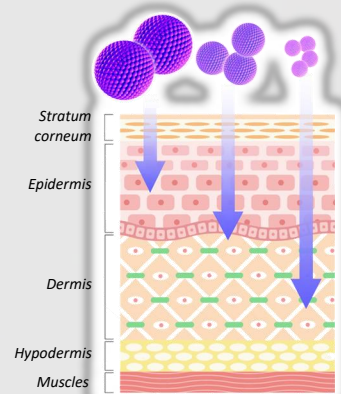
NIO-OLIGO 3<sup>D</sup> is a revolutionary wrinkle solution based on **three Niosome vesicles with different particle sizes** (3-Dimensional Niosome), each one encapsulate a distinct molecular weight of short Hyaluronic Acid (HA) oligomers.

NIO-OLIGO 3<sup>D</sup> modulates an optimal differential penetration of Hyaluronic acid molecules at all skin levels by 3 vesicles of different size.

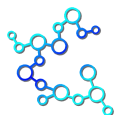
This new approach guarantees an **optimal anti-wrinkle effect** creating a **Botox-Like result**.



**NIO-OLIGO 3<sup>D</sup> IS THE BOTOX-LIKE SOLUTION** DEVELOPED TO REACH ALL DEEP SKIN LEVELS FOR THE MAXIMUM ANTI-WRINKLE AND FIRMING EFFECT



## NIO-OLIGO 3<sup>D</sup> NATURAL INGREDIENTS



~50 kDa LMW HA

Mean Vesicle size: 250nm

Largest Niosome particle size delivers **Low Molecular Weight HA** to the skin providing an exceptional water retention and a high degree of moisturization.



~10 kDa VLMW HA

Mean Vesicle size: 180nm

Medium Niosome particle size delivers **Very Low Molecular Weight HA** to the layers of the epidermis enhancing cell-to-cell contact and cohesion and in this way reducing TEWL (Trans Epidermal Water Loss).



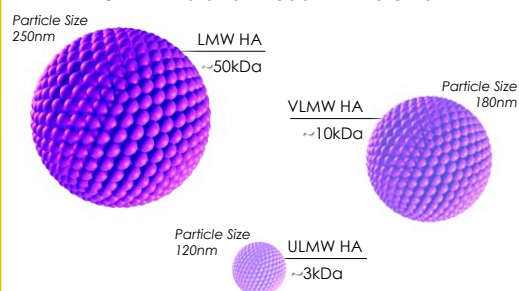
~3 kDa ULMW HA

Mean Vesicle size: 120nm

Smallest Niosome particle size delivers **Ultra Low Molecular Weight HA** to the deepest layer of the skin providing new precursors for the endogenous synthesis of extracellular matrix resulting in skin's optimal hydrocolloid properties.

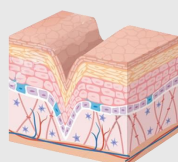
### NIO-OLIGO 3<sup>D</sup>

NATURAL INGREDIENTS ARE ENCAPSULATED INSIDE **3 DIMENSIONS NIOSOME VESICLES**

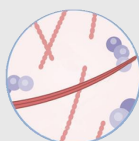


## NIO-OLIGO 3<sup>D</sup> MODE OF ACTION

### AGEING



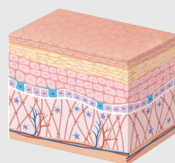
Low Level of Hyaluronic Acid



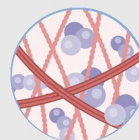
A lower quantity of HA and a progressive reduction of its degree of polymerization occurs in the skin during the ageing process.

In elderly skin, HA degradation occurs at all skin levels with a loss of elasticity and the formation of wrinkles.

### With NIO-OLIGO 3<sup>D</sup>



Optimal Level of Hyaluronic Acid



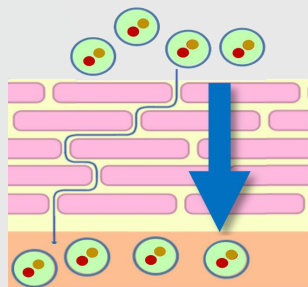
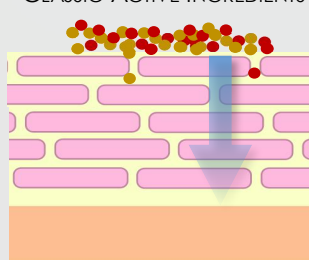
The delivery of 3 different Hyaluronic Acid with specific molecular weights restore the youthful conditions of all the cutaneous layers.

NIO-OLIGO 3<sup>D</sup> reduces fine lines and bring youthful hydration, firmness and elasticity of the skin.

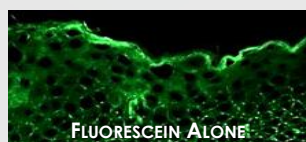
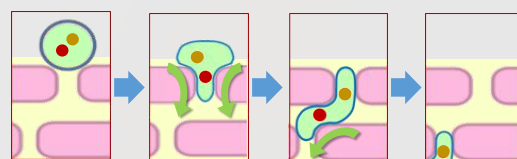
## ULTRA-DEFORMABLE NIOSOME

The Most Advanced Skin Delivery System

### CLASSIC ACTIVE INGREDIENTS



Ultra-Deformable Niosome are elastic vesicles able to **squeeze through Stratum Corneum** reaching living cells inside epidermis to increase the bioavailability of active ingredients



FLUORESCIN ALONE

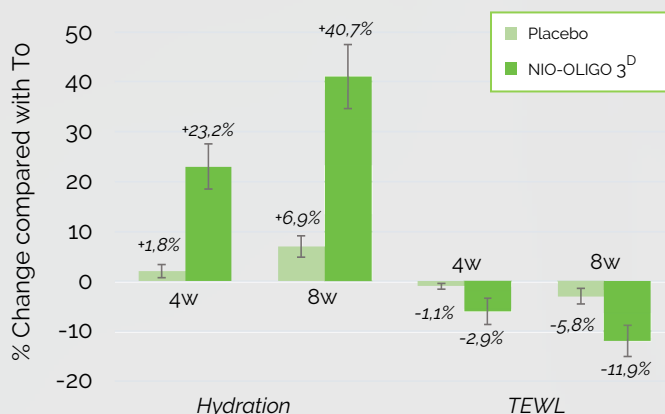


NIOSOME + FLUORESCIN

**NIOSOME DELIVER ACTIVE INGREDIENTS WHERE REALLY EFFECTIVE**  
DRIVING THROUGH THE STRATUM CORNEUM

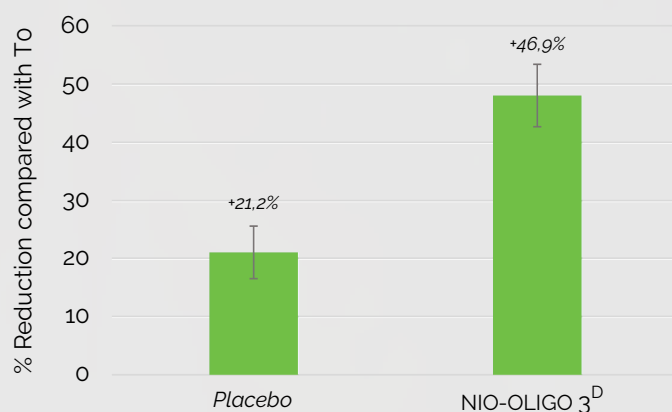
## NIO-OLIGO 3<sup>D</sup> ON SKIN BARRIER

Measurement of Skin Hydration and TEWL using DermaLab Combo technique applying 2% NIO-OLIGO 3<sup>D</sup> cream or placebo on 22 volunteers twice daily for 28 days



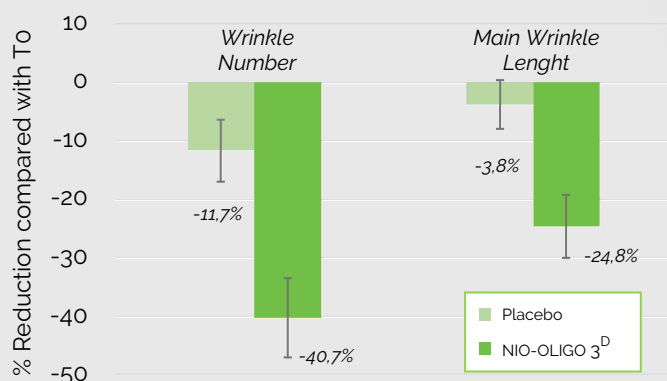
## NIO-OLIGO 3<sup>D</sup> ON SKIN SMOOTHNESS

Complexion Analysis of skin texture on 22 volunteers applying 2% NIO-OLIGO 3<sup>D</sup> cream on face vs placebo twice daily for 28 days



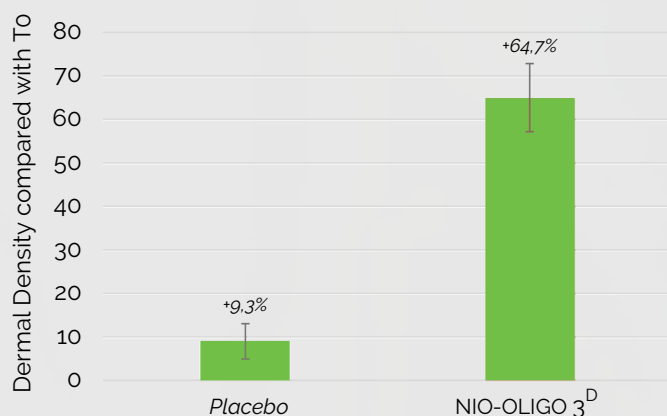
## NIO-OLIGO 3<sup>D</sup> ON WRINKLE REDUCTION

Software analysis of VISIA-CR Polarized Images of Wrinkles Number and Main Wrinkle Length after application of placebo and 2% NIO-OLIGO 3<sup>D</sup> cream on half-face of 22 volunteers twice daily for 28 days



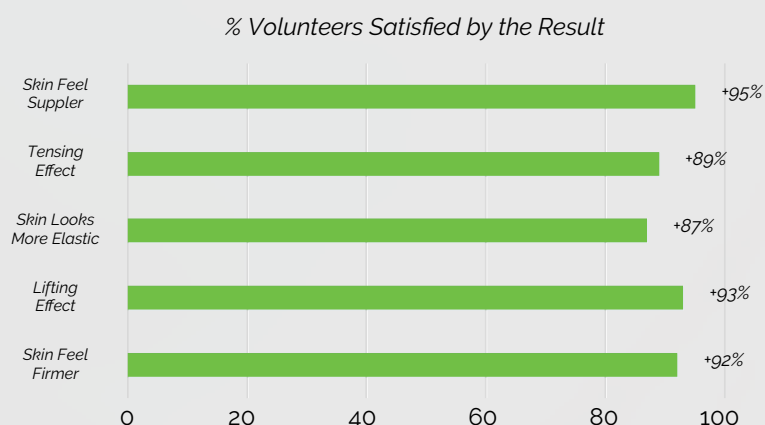
## NIO-OLIGO 3<sup>D</sup> ON DERMAL DENSITY

High Resolution Ultrasound Skin-Imaging (Dermascan CortEx) of Dermal Density applying placebo or 2% NIO-OLIGO 3<sup>D</sup> on 22 volunteers twice daily for 28 days



## NIO-OLIGO 3<sup>D</sup> SELF-ASSESSMENT

Assessment of Wrinkles appearance after applying 2% NIO-OLIGO 3<sup>D</sup> cream on half-face of 22 volunteers twice daily for 28 days



# NIO-OLIGO 3D

## NIOSOME TECHNOLOGY

### BOTOX-LIKE WRINKLE SOLUTION

#### CLAIMS

- ANTI-WRINKLE
- MOISTURIZING
- STRUCTURING AND FIRMING
- REGENERATING AND REPAIRING

#### COSMETIC APPLICATION

- ANTI-AGING CREAM
- NOURISHING CARE
- REGENERATING AND REPAIRING CARE
- DAY AND NIGHT CREAM

#### INCI NAME

Hydrolyzed Sodium Hyaluronate, Polyglyceryl-6 Oleate, Polyglyceryl-4 Caprate, Glycerin, Aqua/Water

#### SAFETY & TOXICITY

Reference COMMISSION REGULATION (EC) No 987/2008 of 8 October 2008 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH):

- non-irritating
- non-toxic

#### FORMULATION SUGGESTIONS

<b>Use Levels:</b>	0,5% - 2%
<b>Incorporation:</b>	Diluite in water before blending Do not heat above 50°C
<b>Origin:</b>	Botanical, Biotechnological
<b>Application:</b>	Lotions, O/W and W/O emulsions, Gels
<b>Preservative:</b>	None
<b>Solubility:</b>	Dispersible in water
<b>Compliant regulation:</b>	US - EU - China - Japan



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