

MALAYSIA DISTRIBUTOR

**JLC ASIA**

SWITZERLAND PRINCIPAL

**HYALUAL**



- Quality is confirmed by **CE mark**
- Manufacturing according to **GMP (Good Manufacturing Practice)**
- HA-Purification technology (**Hyalual Purification Technology**)
- Double Synergic Effect technology (**the synergic result of two components HA and succinic acid**)
- **Monodispersity** of HA molecules (2.5 million Da)
- Enhanced buffer protection of the redermalizing product

**ELECTRI**



**Electri** is a synergy of **succinic acid and high molecular weight hyaluronic acid** in the physiological concentration, which restores the energy exchange and metabolic functions at the cellular level, and **helps the skin regain its youthful look and healthiness.**

**Composition of the product;**

- Sodium succinate 1.6%
- HMW hyaluronic acid 0.55%
- Package: 1 syringe 1.5ml
- Set of needles: 30G, 8mm



## Succinic acid



- Normalization of energy metabolism
- Antihypoxic effect
- Antioxidant effect
- Cytoprotective effect
- Activation of cell proliferation
- Synthesis of structural proteins
- Anti-inflammatory action
- Improvement of microcirculation

**DOUBLE  
SYNERGIC  
EFFECT**



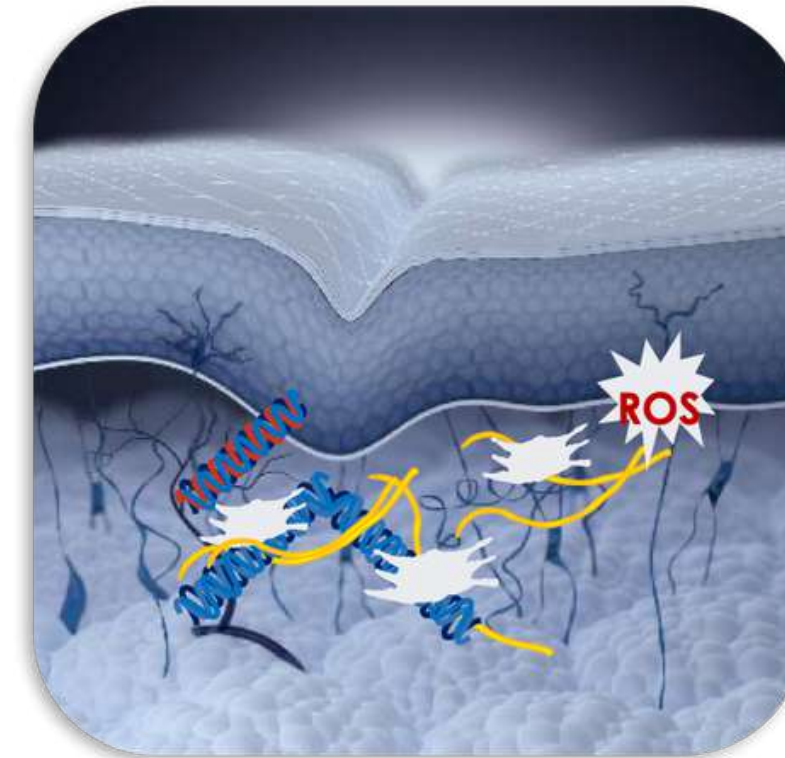
## Hyaluronic acid

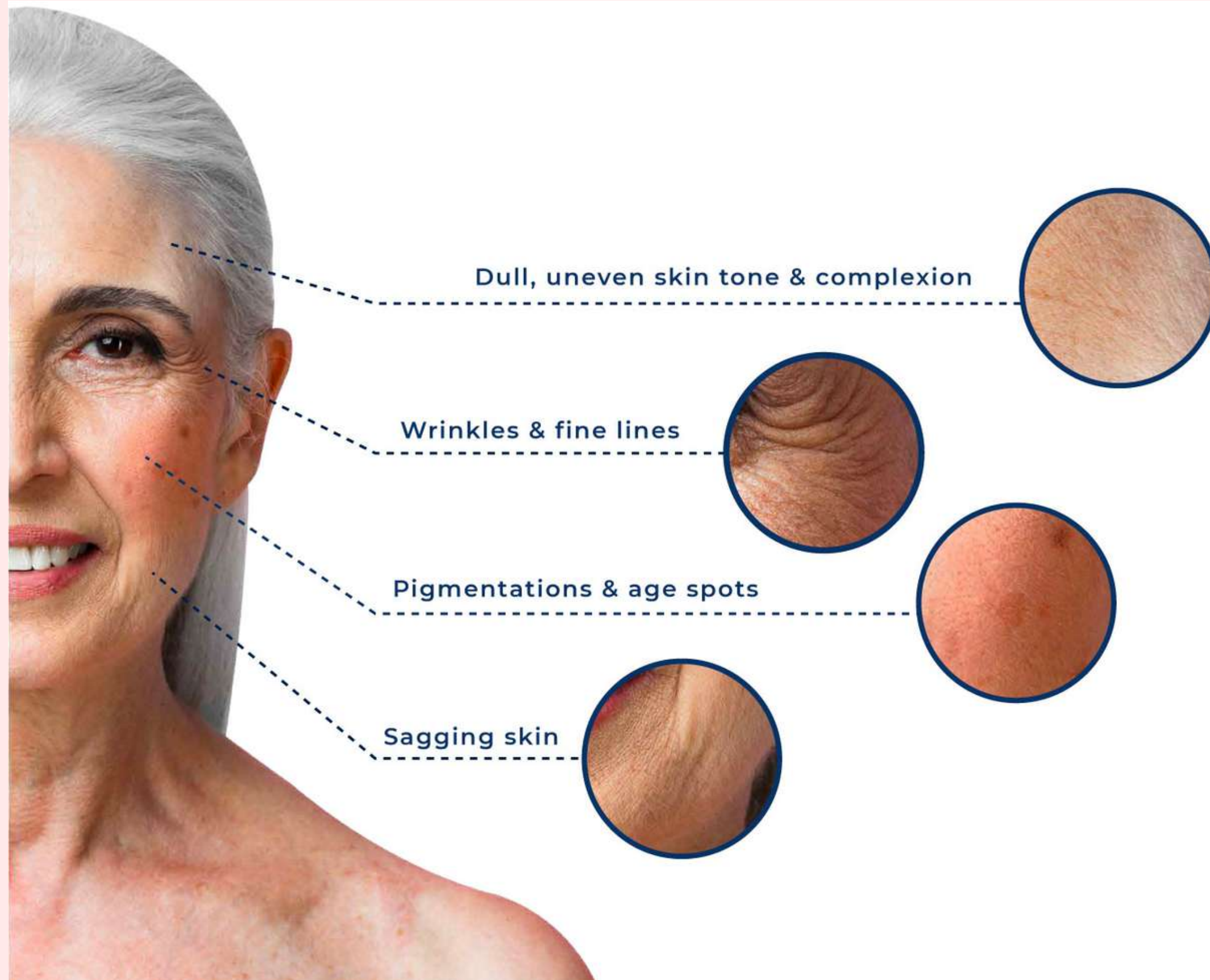


- Restoration and maintenance of water balance
- Mechanical support of tissues
- Anti-inflammatory effect
- Antioxidant effect
- Regenerative effect

## Pathological Process

- Aggression of free radicals
- Activity of inflammatory cytokines
- Decreased microcirculation, trophism
- Hypoxic changes
- Energy starvation
- Decrease in biosynthetic activity





we focus



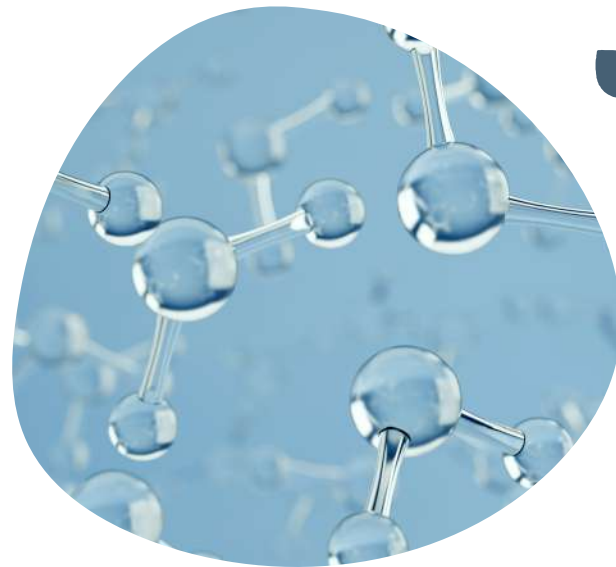
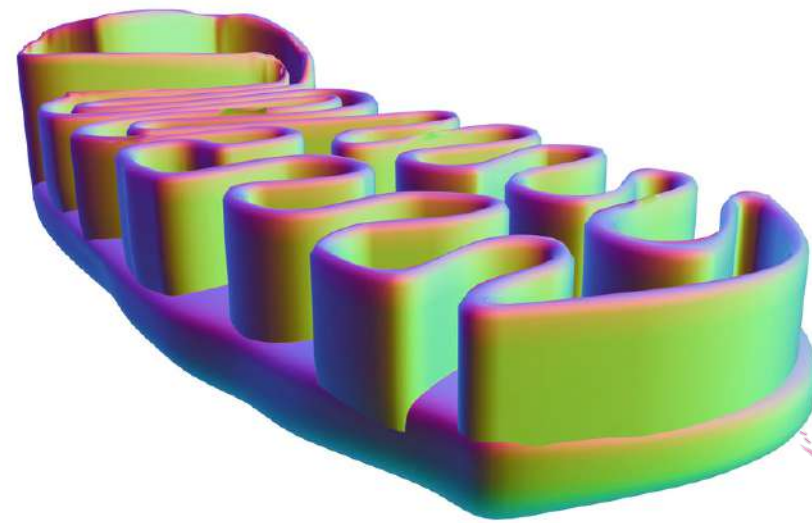
**Yay !  
&  
Nay!**



# HUMAN SKIN CELL

2

Mitochondria  
“powerhouse”  
typically range from  
0.5 to 10 micrometers



3

small organic molecule. In  
its pure form, succinic acid  
typically consists of small  
crystals or a fine powder

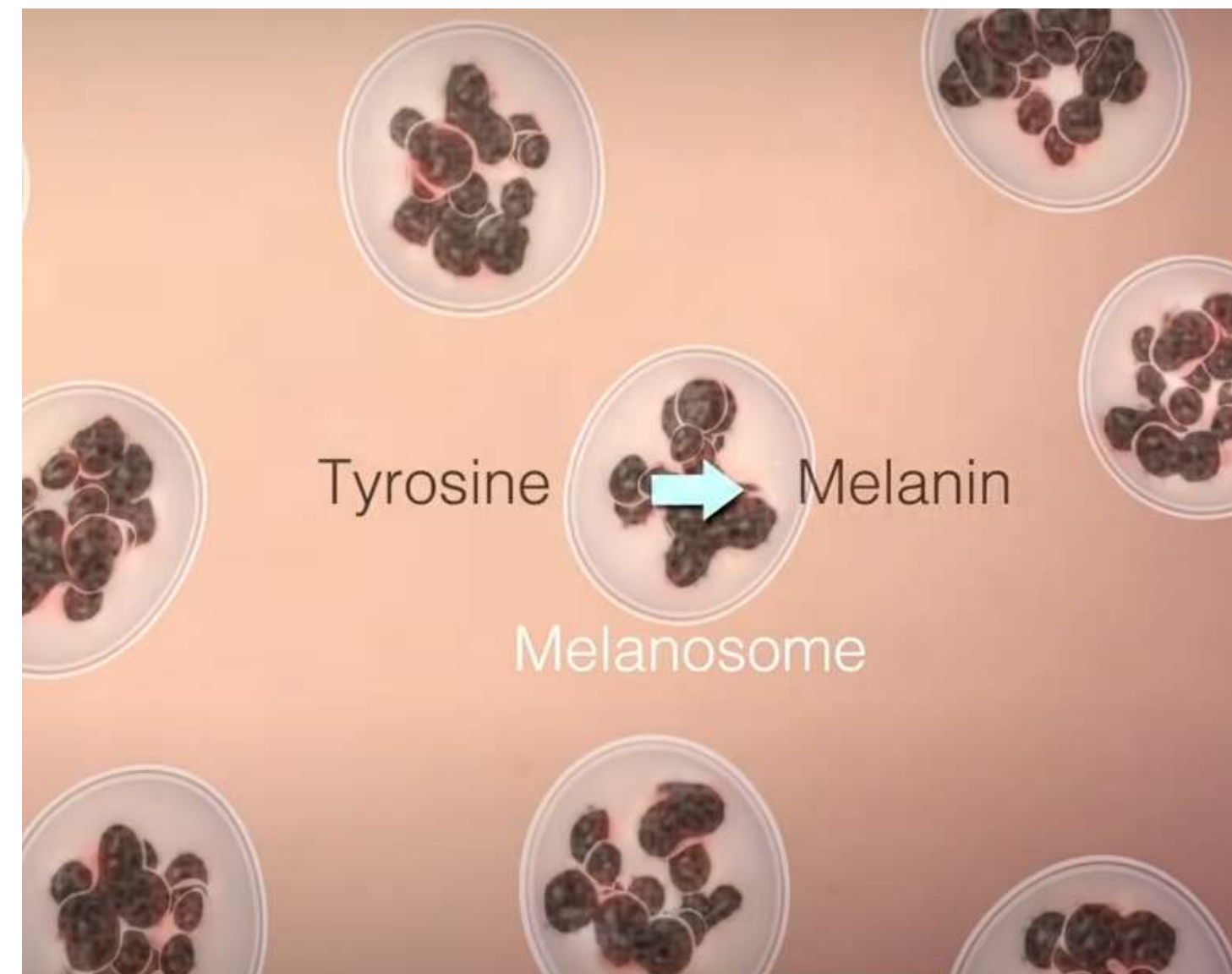


1

30 to 40 micrometers in diameter

# MELANIN PRODUCTION

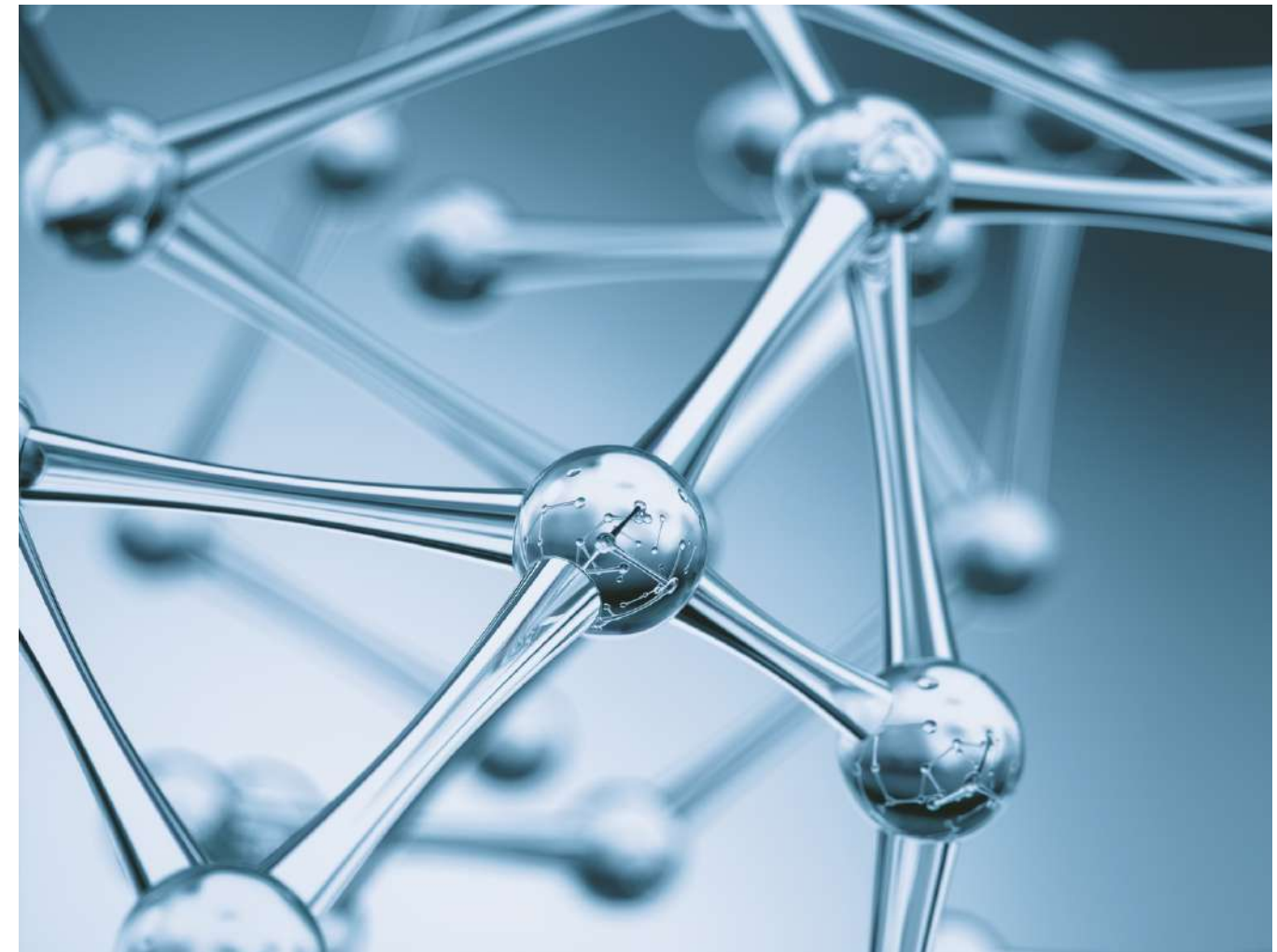
**Melanin** is the pigment responsible for the color of the skin, hair, and eyes. **Tyrosinase** is a key enzyme involved in the synthesis of melanin.

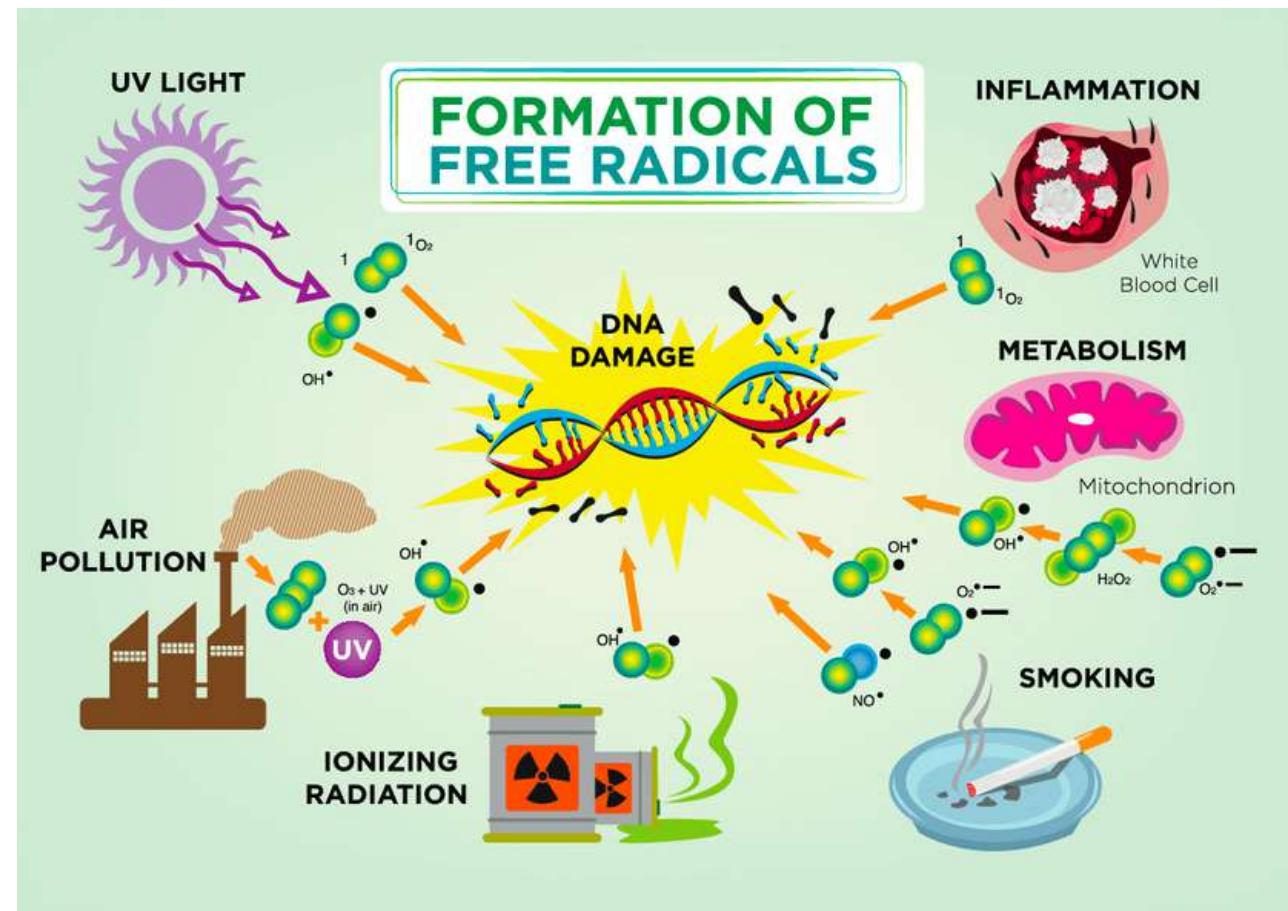


# SUCCINIC ACID

Succinic acid can **slow down the enzyme (tyrosinase) responsible for making melanin**. By doing this, it helps control the amount of melanin produced, **preventing excessive darkening of the skin**.

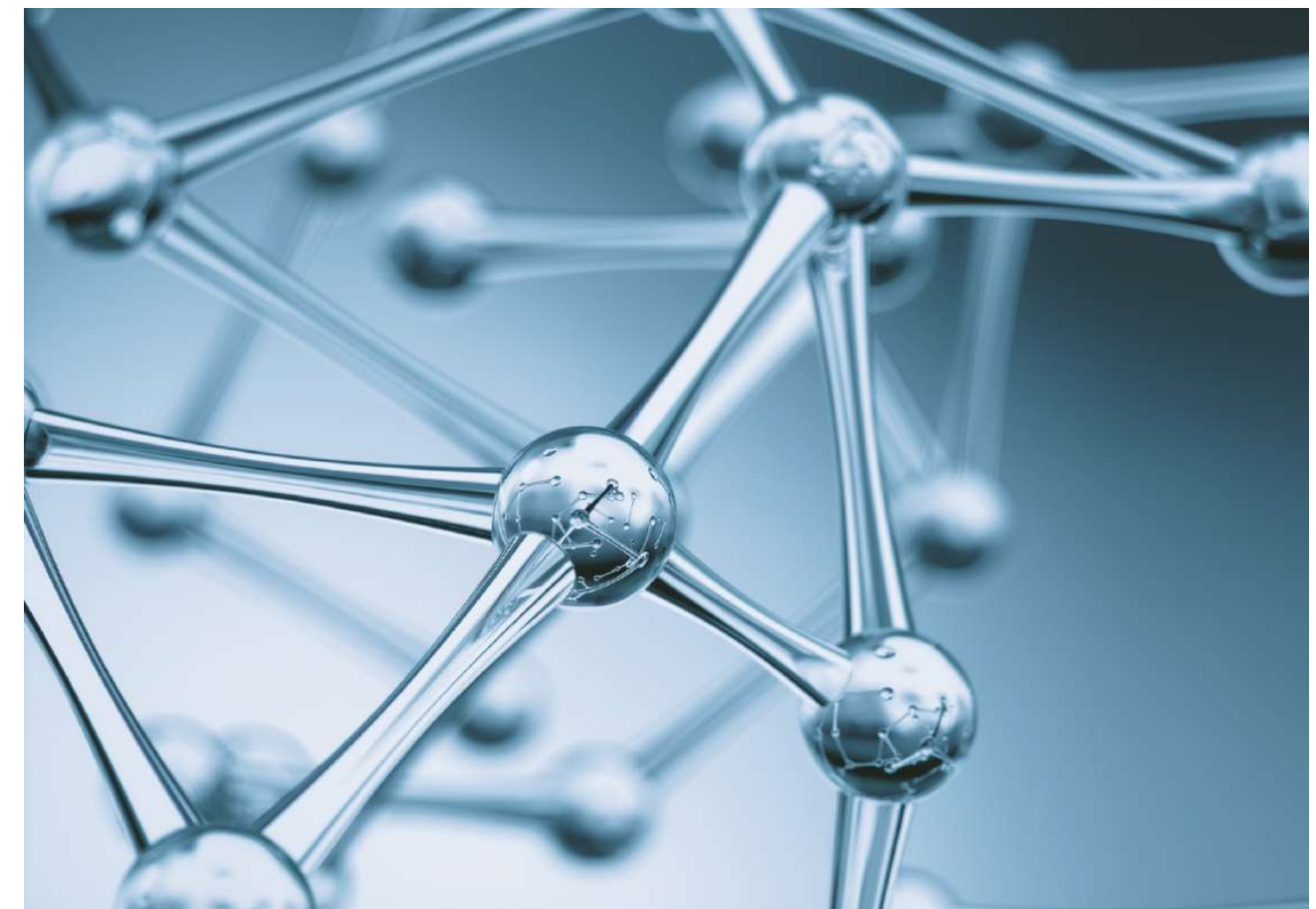
Succinic acid may **influence melanin production by interacting with copper ions**. It has been suggested that succinic acid may **chelate or bind to copper ions, potentially reducing their availability for tyrosinase activity**. This interference with copper ions could contribute to the inhibitory effect of succinic acid on melanin synthesis.





## OXIDATIVE STRESS CAN STIMULATE MELANIN PRODUCTION

BY MITIGATING OXIDATIVE STRESS,  
SUCCINIC ACID INDIRECTLY CONTRIBUTES  
TO REGULATING MELANIN SYNTHESIS.



## ELECTRI BASED ON SA AND HA INHIBITS MELANOGENESIS

**SUCCINIC ACID** is a dicarboxylic acid with metal chelating potential and a particular affinity to copper. Copper is present in the active site of **tyrosinase** and has a vital role in the activity of this enzyme.

**The chelation of the copper in the tyrosinase results in blocking its enzymatic activity and complete enzyme function loss.**

Tyrosinase is an enzyme containing copper that catalyzes the production of melanin from tyrosine through oxidation (oxidase).

1. Panich U. Antioxidant Defense and UV-Induced Melanogenesis: Implications for Melanoma Prevention. In: Current Management of Malignant Melanoma. Chapter 12. ISBN 978-953-307-264-7. InTech, 2011  
5, Hwang JS, Lee HY, Lim TY, Kim MY, Yoon TJ. Disruption of tyrosinase glycosylation by N-acetylglucosamine and its depigmenting effects in guinea pig skin and in human skin. J Dermatol Sci 2011; 63(3): 199–201

**PRIME**  
PRACTICE RESEARCH IN MEDICAL ESTHETICS

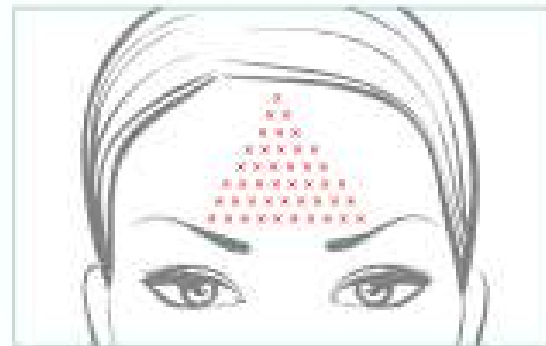
Treating hyperpigmentation using a combination of hyaluronic and succinic acids

Maurizio Ceccarelli MD, SCD, PATH.CL.S, PROF.  
Director of the Centre for Study and Research in Aesthetic and Physiological Medicine



Maurizio Ceccarelli examines how combination injections of hyaluronic and succinic acids can be used to treat hyperpigmentation and other skin changes caused by UV irradiation and photodamage

## ELECTRI. PROCEDURE PROTOCOL



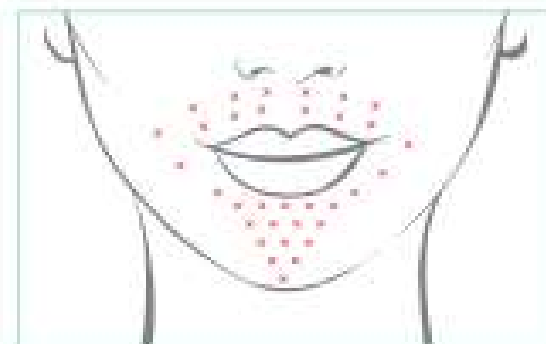
Forehead



Periorbital zone



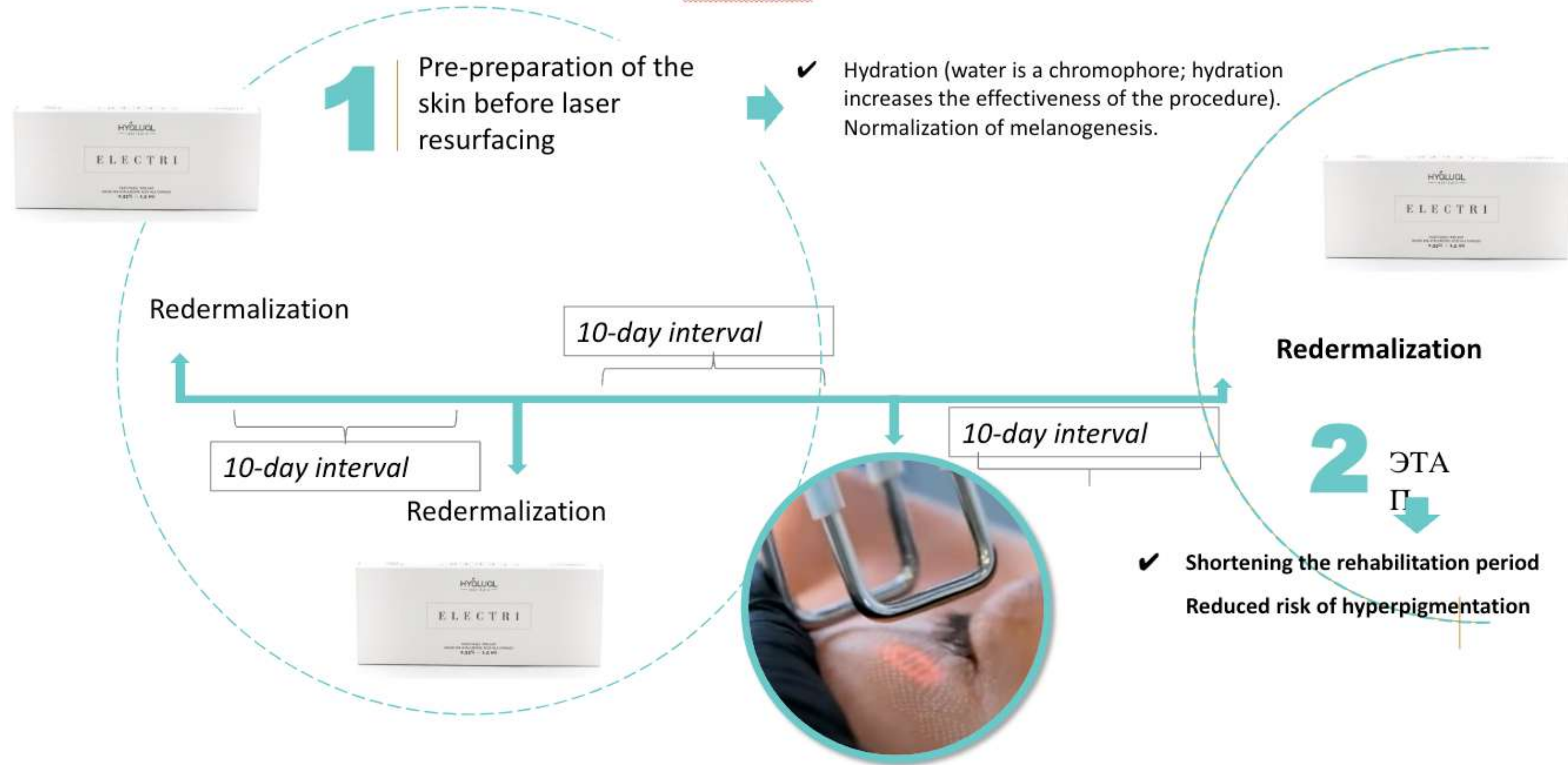
Cheeks



Perioral zone and chin

- Papules  $D = 1\text{mm}$ , distance between rows  $0.5 - 1\text{ cm}$ , depending on the area of the treated area
- The amount of the drug per procedure:  $1.5\text{ ml}$
- Intradermal injections by papular technique
- Course from 2 redermalizations with an interval of 10-14 days

## COMBINATION ELECTRI WITH LASER CO2



# CLINICAL CASE. URBANIC AGING OF THE SKIN, FOTODAMAGE

## Design

Patient, 43 y/o

**Product** ELECTRI

**Indication** Heterogeneous skin tone,  
pigment spots, thinning of the skin,  
reduced turgor

**Protocol** ELECTRI, 3 sessions  
with a 3 weeks interval.

Electri: 5,5 mg/ml hyaluronic acid + 16 mg/ml Succinate)

*Unretouched photos were taken  
before treatment and 14 days after*



Before course



After 2 weeks of course

## CLINICAL CASE. URBANIC AGING OF THE SKIN, FOTODAMAGE

### Design

Patient, 42 y/o

#### Product

**ELECTRI**

#### Indication

Heterogeneous skin tone,  
pigment spots, thinning of the skin,  
reduced turgor

#### Protocol

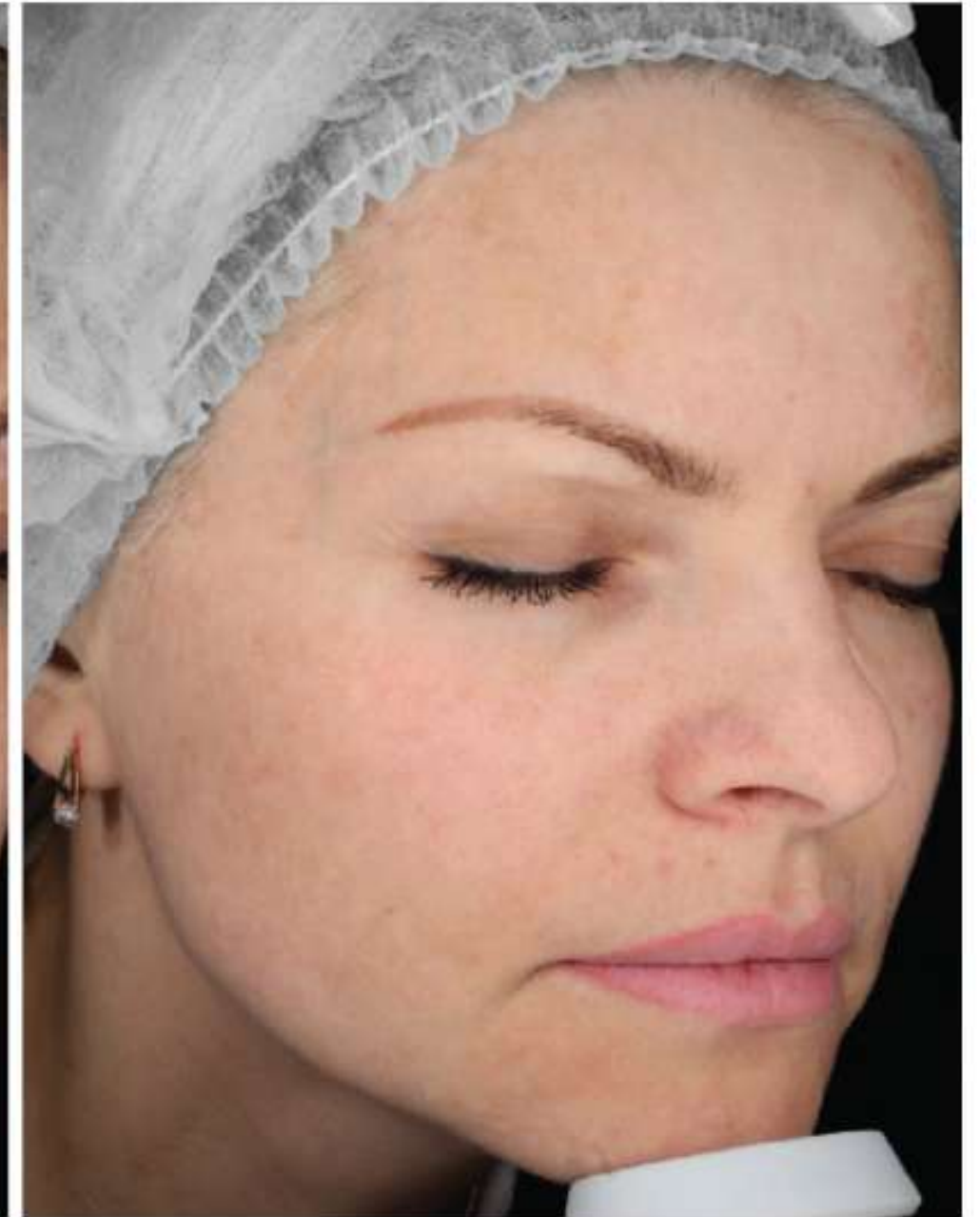
**ELECTRI**, 4 sessions  
with a 3 weeks interval.

Electri: 5,5 mg/ml hyaluronic acid + 16 mg/ml Succinate)

*Unretouched photos were taken  
before treatment and 14 days after*



Before course



After 2 weeks of course



Before



After



Before



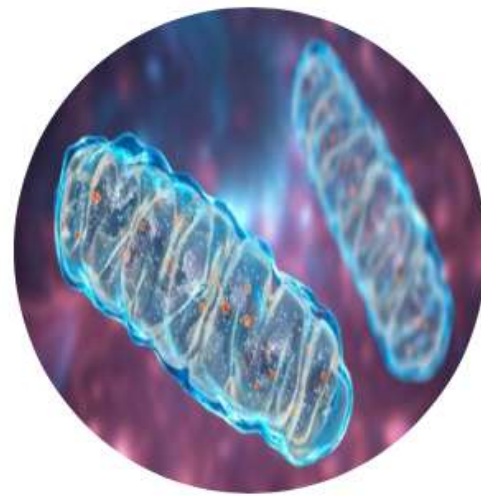
After

## SUCCINIC ACID NORMALIZES MICROCIRCULATION

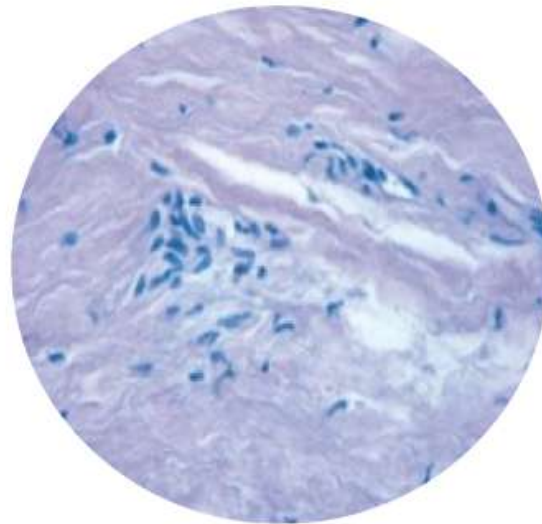
- ACTIVATION OF THE REPAIR OF THE VASCULAR WALL
- LEVELING THE INFLUENCE OF VASODILATORS
- NORMALIZATION OF VASCULAR TONE
- CYTOPROTECTIVE EFFECT ON ENDOTHELIOCYTES
- INCREASED PRODUCTION AND RELEASE OF VASCULAR ENDOTHELIAL GROWTH FACTOR (VEGF), ANGIOPOIETIN-1 AND 2, ANGIOGENIC ANTI-INFLAMMATORY MEDIATORS (IL-1 AND IL-6)
- STIMULATION OF LYMPH FLOW THROUGH GPR 91 RECEPTORS

## MAIN SYNERGISTIC EFFECTS OF THE COMBINATION OF HYALURONIC ACID AND SODIUM SUCCINATE

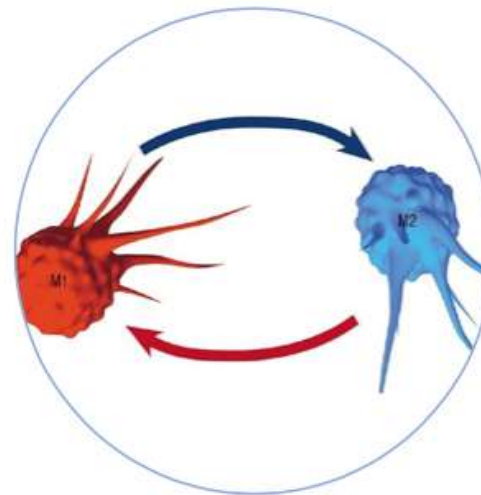
ENERGY RECOVERY



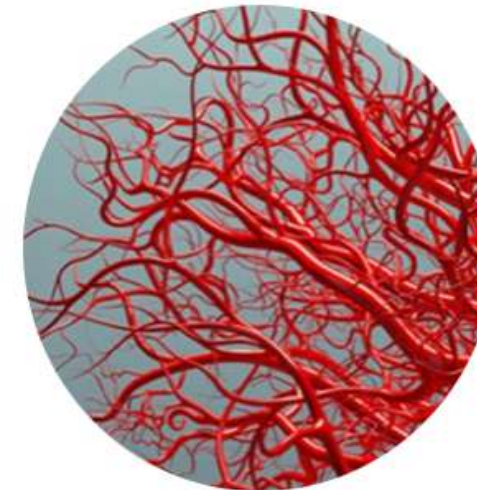
REGENERATIVE  
ACTION



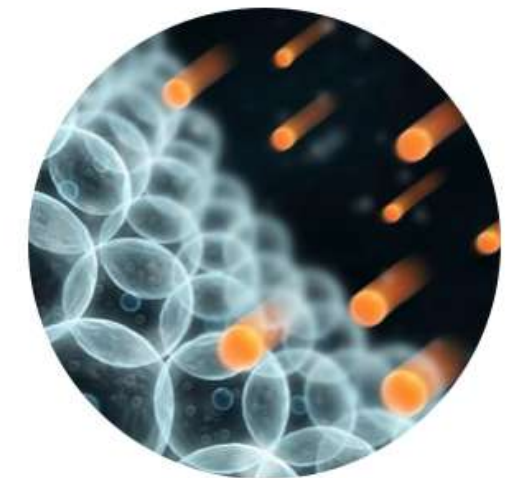
ANTI-INFLAMMATORY EFFECT



ANGIOGENIC ACTION  
& ↑ MICROCIRCULATION



ANTIOXIDANT EFFECT



# ADVANTAGES

- EFFECTIVENESS

The unique formulation combining high molecular weight hyaluronic acid in a physiological concentration (0.55%) with sodium succinate ensures quick absorption.

- SAFETY

Electri's hypoallergenic formulation is highly bio-compatible. It is free of any ingredient not found in the human body.

- CONTROLLABILITY

Physiological concentration of hyaluronic acid (0.55%) ensures easy product administration that does not provoke stable tissue swelling (pastosity).

- RELIABILITY

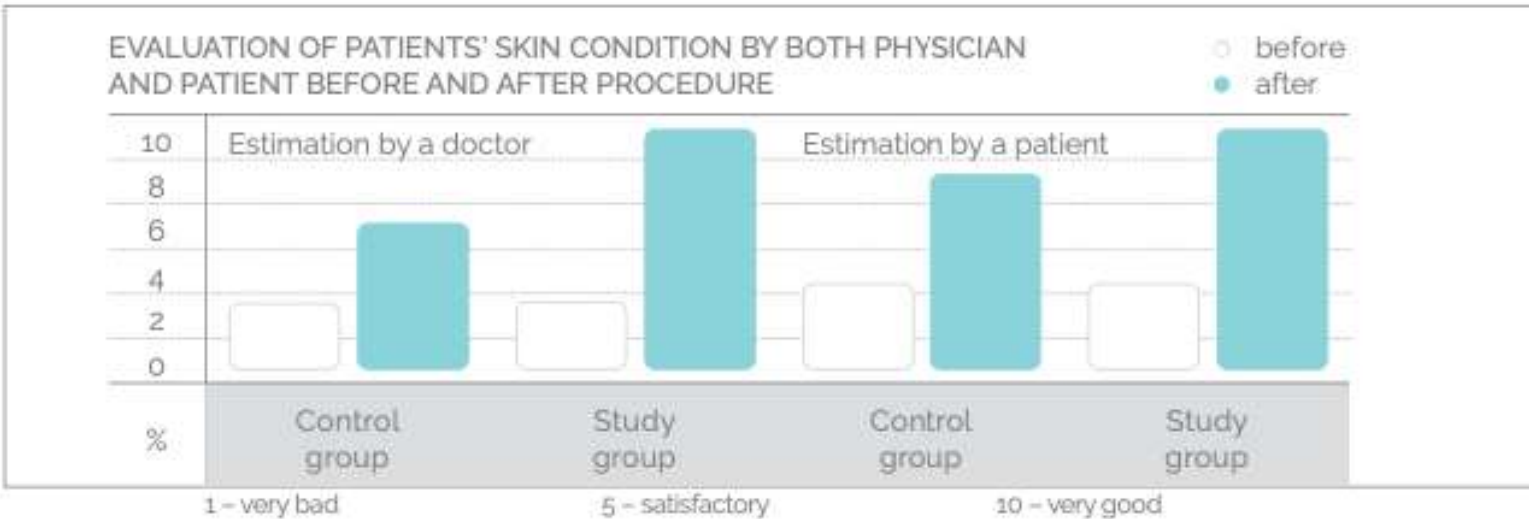
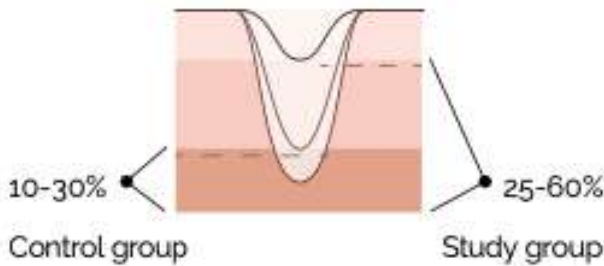
Electri is manufactured according to international quality standard ISO. It also has the CE mark.

# ELECTRI CLINICAL EFFECTIVENESS

### Reduced wrinkle depth

Based on micro video diagnostic skin examination (Skin Care)

After one-time use of Electri, patients in the study group showed a 15-60% reduction in wrinkle depth in various skin areas, as well as visible structural improvements of the corneous layer.



## One ELECTRI procedure provides:

- Dark eye circle
- Natural skin moisturization
- Visible complexion improvements
- Normalized microcirculation
- Structural skin improvements
- Slowed process of skin aging
- Antioxidant defense in dermis cells
- Delayed initial onset of skin aging
- Maximum effectiveness with fast results





**HAPPY SELLING**