



# HYPER PIGMENTATION



Hyperpigmentation is the darkening of an area of skin or nails caused by increased melanin. Hyperpigmentation can affect the skin color of people of any race.

## Common pigmentation disorders that can be corrected by Redermalization

Disorder	Description	Location	Etiology
Postinflammatory hyperpigmentation	Irregular, darkly-pigmented macules or patches	Previous sites of injury or inflammation	Trauma, inflammation
Melasma	Pigmented, well-defined macules; light brown, brown, or gray in color	Face, forearms	Pregnancy, oral contraceptives, phenytoin (Dilantin), idiopathic
Solar lentigines	1 to 3-cm macules, well-circumscribed, light yellow to dark brown, variegated color	Face, hands, forearms, chest, back, shins	Acute, chronic ultraviolet light exposure
Ephelides	1 to 2-mm, sharply defined macules, red to tan to light brown in color	Face, neck, chest, arms, legs	Sun exposure in susceptible persons
Café-au-lait macules	Tan to brown patches, 1 to 20 cm, epidermal, present at birth or early childhood	Usually on trunk, but possible anywhere	Increased melanin in melanocytes, basal keratinocytes

## SCIENCE

# REDERMALIZATION

Treatment course for skin quality improvement with Xela Rederm.

## Hyaluronic acid

is a natural material that is contained in neuronal, connective and epithelial tissues

- Helps to activate anti-inflammatory mediators
- Restores and maintains water balance
- Contributes to the synthesis of basic structural proteins
- Provides mechanical support for tissues

Preparations based on high molecular weight hyaluronic acid are used for the Redermalization procedure. Due to its properties, it provides a much longer lasting effect on improving skin quality



## Succinic acid

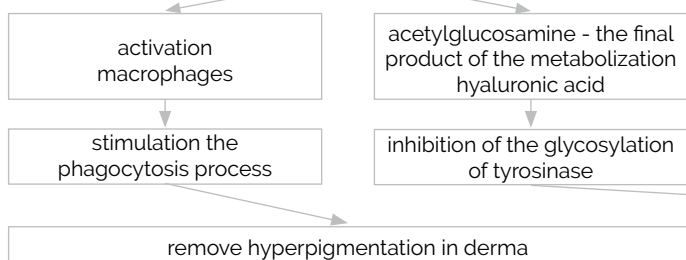
(succinate) is a natural material that is contained in neuronal, connective and epithelial tissues

- Helps to normalize microcirculation,
- Contributes to lymphatic drainage
- Helps to regulate cellular energy exchange
- Has antioxidant properties
- Helps to prevent damage of the cell membrane
- Contributes to the synthesis of basic proteins

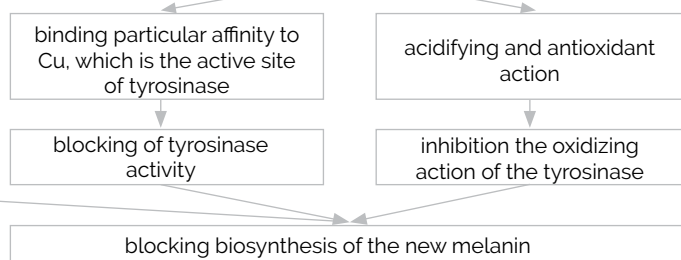
Succinic acid has been found an important component which has provided a breakthrough in improving skin

## Redermalization mechanisms of action

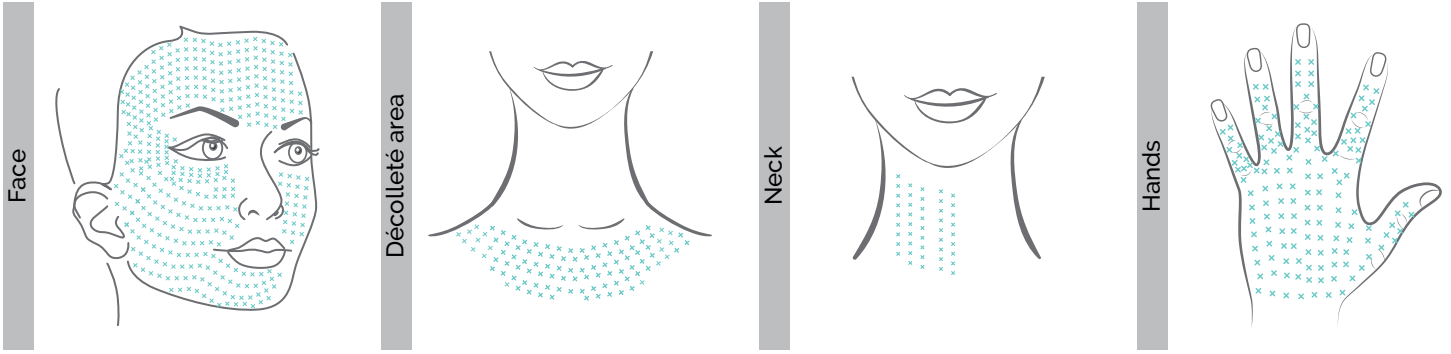
### Succinic acid



### Hyaluronic acid



## Areas of treatment

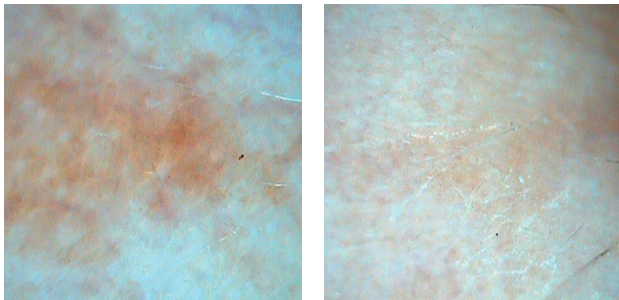


## Procedure protocol

**Product:** Hyalual Light / Smart / Booster.  
 Intradermal injections with the papular technique.  
 d = 1-2 mm, the distance between papules 2-3 mm. Amount of solution 1-2 ml.

Morphotype*	Procedure I	Procedure II 2 weeks later	Procedure III 2 weeks later
Tired face*	Xela Rederm 1,1% Papular	Xela Rederm 1,1% Xela Rederm 1,8% Papular	Xela Rederm 2,2% Papular
Deformative*	Xela Rederm 1,1% Papular	Xela Rederm 1,1% Papular	Xela Rederm 1,8% Xela Rederm 2,2% Linear
Wrinkling*	Xela Rederm 1,8% Papular	Xela Rederm 1,8% Xela Rederm 2,2% Papular	Xela Rederm 1,8% Xela Rederm 2,2% Linear
Muscular*	Xela Rederm 1,1% Papular	Xela Rederm 1,8% Papular	Xela Rederm 2,2% Linear

## RESULTS



Patient, 36 years old  
 Areas treated: Locally.  
 Products used: Xela Rederm 1,1% (first and second procedure); Xela Rederm 1,8% 2 ml (third procedure)

Unretouched photos were taken before treatment and 30 days after\*\*



Patient, 40 years old  
 Areas treated: Full face.  
 Products used: Xela Rederm 1,1% 2 ml

Unretouched photos were taken before treatment and 30 days after\*\*\*

Patient, 33 years old  
 Areas treated: Locally.  
 Products used: Hyalual Light 2 ml (first and second procedure);  
 Xela Rederm 1,8% 2 ml (third procedure)

Unretouched photos were taken before treatment, 14 days and 30 days after\*



\* Type of aging skin by Kolgunenko  
 \*\* Courtesy of Dr. Roberto Pelliccia  
 \*\*\* Maurizio Ceccarelli in "Treating hyperpigmentation using a combination of hyaluronic and succinic acids" Prime Journal Vol 6, Issue 4, July/August 2016