

science against hyperpigmentation

Me

@ dermamelan®

dermamelan° is the depigmentation method that provides an intensive corrective action on skin hyperpigmentations while regulating melanin overproduction, controlling reappearance of new spots in the long term.

A cutting-edge formula

dermamelan° method combines the experience of **mesoestetic**° in the field of hyperpigmentation with the latest scientific research and the application of new technologies for its development:



Big data



Artificial intelligence



Computational design

Two patents supporting its innovation



new
PATENTS
mesoestetic



[SYN]pigmentarget®

Unique combination of three selected active ingredients formulated at optimum concentrations, for a high-synergism therapeutic response in the interaction with key pigmentation targets.⁽¹⁾



melaphenone[®]

Own molecular design. Its molecular structure and 3D conformation provide a high specificity and safety in the inhibition of the activity of tyrosinase enzyme.⁽²⁾

Transepidermal vehiculation systems



Multilamellar nanovesicles with targeted action

Carries and releases active ingredients selectively and improves their stability.



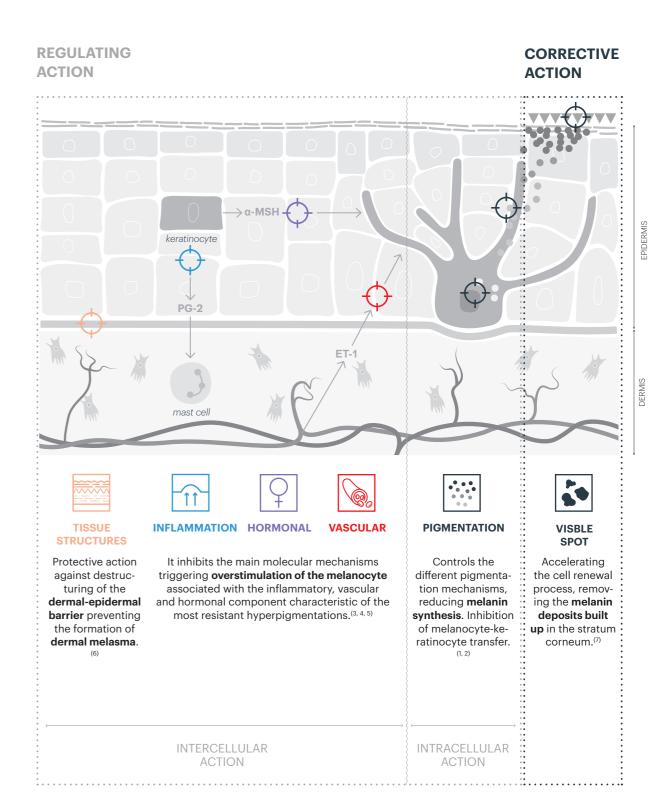
Iontophoresis

Technology that allows the formation of microchannels to improve permeability and facilitate that the active ingredient reaches its site of action.

Actions & Mechanisms

The latest medical-scientific developments in the field of hyperpigmentation have enabled us to identify new molecular targets responsible for the disease.

dermamelan* has been formulated specifically to act effectively and synergistically on the main key targets in the skin hyperpigmentation process. Its dual corrective and regulating action achieves a unique integral treatment to remove the existing spots and prevent their reappearance.







NANOVESICLES

dermamelan mask

Facial mask for professional use.

INTENSIVE DEPIGMENTATION

Efficiently removes the melanin deposits built up in the stratum corneum, reducing the existing pigmentation.

Actuation time of four hours, regardless of the skin phototype. 10 g jar

Depigmenting power



Regulation capacity



dermamelan ion mask

Hydrogel facial mask for professional use.

DEPIGMENTANT AND PERMEABILISER

Containing depigmenting active ingredients with corrective action.

The ionic technology creates microchannels that facilitate transepidermal vehiculation.

Actuation time of four hours, regardless of the skin phototype.

20 g mask



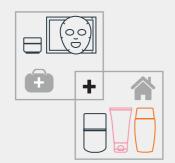


Depigmenting power



Regulation capacity

The full dermamelan® method must be performed to achieve the target result.



TECHNOLOGY

The action of the method products ensures:

- ↑ Higher depigmenting efficacy.
- ↑ Greater **comfort** during treatment.
- ↓ Lower risk of repigmentation.

Compliance with the home regimen is essential to meet the depigmenting objective in the short and long term.



products for home use



TARGETED-ACTION NANOVESICLES

dermamelan treatment

Facial cream for home use.

CORRECTIVE AND REGULATING

It exerts a **gradual corrective** action and an **intensive** regulating action. It acts at two regulation levels:

- ☐ It inhibits **melanin synthesis** in the melanocyte, controlling the new formation of pigment.
- ☐ It regulates the main known targets that cause **melanocyte** overstimulation.

airless 30 g



Depigmenting power

Regulation capacity



melan recovery

Facial balm for home use.

SOOTHING AND REGENERATING

It returns nutrition and balance to skin that has been subject to tissue renewal treatments.

It relieves and reduces sensitivity, providing comfort in case of inflammatory signs and redness.

50 mL tube



Soothing action



Regulation capacity



mesoprotech® melan 130 pigment control

Facial sunscreen for home use.

SPECIFIC PHOTOPROTECTION FOR PIGMENTED SKIN

Very high sunscreen with colour, of maximum efficacy and safety against 131 UVB and 67 UVA. It protects the skin and helps control skin pigmentation.

50 mL bottle



Protective action





solution





dermamelan mask



dermamelan ion mask



dermamelan treatment



melan recovery



mesoprotech® melan 130 pigment contol

TREATMENT AT THE CLINIC

intensive depigmentation

Treatment at the clinic exerts an intensive depigmentation action focused on acceleration of the cell renewal process and elimination of melanin deposits built up in the skin.

STEP 1

CLEANING AND PREPARATION OF THE SKIN

Apply the oil removing solution using a gauze over the previously clean, dry skin.

STEP 2

INTENSIVE DEPIGMENTATION

Spread the entire content of the package, 10 g of dermamelan mask evenly over the face, avoiding contact with sensitive areas.*

STEP 3

MAXIMISES PENETRATION OF ACTIVE INGREDIENTS

Place the hydrogel side of dermamelan ion mask directly over dermamelan mask. The application of this mask maintains moisture levels and maximises the action of the active ingredients.



Leave both masks on for 4 hours regardless 4h of the severity of hyperpigmentation and the skin phototype.





REMOVAL OF

FACE MASKS

At the end of the

the **dermamelan**

ion mask gently

from the face.

patient must remove

detaching the mask

Subsequently remove the **dermamelan** mask with plenty of

warm water, avoiding

contact with the eyes.

four hours, the

HOME TREATMENT

4 MONTHS

continuous depigmentation and regulation of hyperpigmentation

After 48/72 h of removal of the masks, home treatment starts.

The home regimen provides a continuous depigmenting **action**, reducing the spot progressively during the treatment. It also exerts a **regulating action** in the long term inside the melanocyte, reducing melanin synthesis and acting on the origin of hyperpigmentation to control reappearance of the spot.

HOME REGIMEN







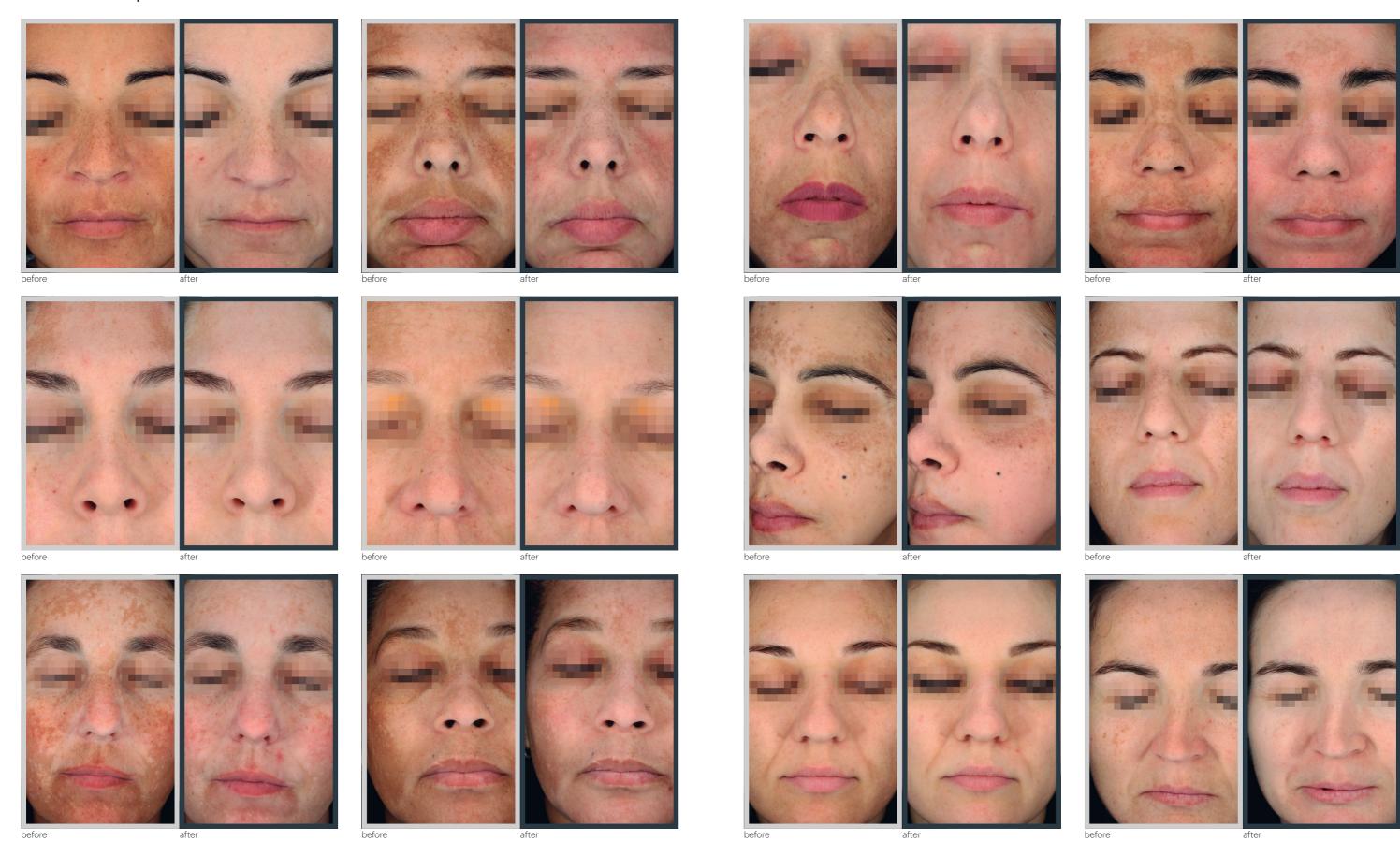


Apply dermamelan treatment twice a day followed by melan recovery, and mesoprotech[®] melan 130 pigment control during daily applications.

^{*}Lower eyelids, lateral canthus, furrows of the wings of the nose, and mucous lips.



Case reports⁽⁷⁾



Ме

@ dermamelan®

In-vitro efficacy studies





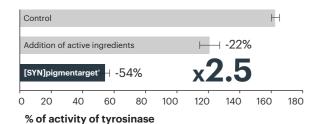
TOTAL MELANIN

Inhibition of melanin formed in a culture of treated melanocytes vs. control culture.

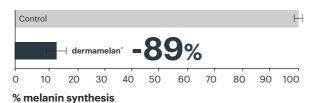
Melanocytes stimulated with L-tyrosine⁽⁹⁾

SYNERGISTIC ACTIVITY OF [SYN]pigmentarget®

Synergy is demonstrated by comparing inhibition of tyrosinase activity of the actives separately vs. the actives together.



Culture of melanocytes stimulated with L-tyrosine(1).



EFFICACY OF melaphenone®

It demonstrates the effectiveness of its inhibitory action of the enzyme tyrosinase achieve a regulation of melanin synthesis.



% of activity of tyrosinase

Culture of melanocytes stimulated with melaphenone (2).

Assessment of the efficacy of dermamelan° in the activity of the different intercellular pathways



HORMONAL

Inhibits the dendricity of melanocytes cultured with α -MSH.

Study in vitro (microscopy) $^{(a)}$ culture of melanocytes stimulated with IBMX, an activator of the α -MSH pathway.







VASCULAR

Inhibition of the DCT enzyme in melanocytes stimulated with ET-1.



Study in vitro (qPCR)(4) culture of melanocytes stimulated with ET-1 and treated with derma-



INFLAMMATION

Inhibition of the PG-2 -producing enzyme



Study in vitro (qPCR)(5) culture of fibroblasts



STRUCTURES

Improved **TIMP3** expression that inhibits MMP that degrade collagen IV.



Study in vitro (qPCR)(6) culture of fibroblasts

Other complementary depigmenting solutions



Professional medical products



mesopeel melanostop tran3x

50 mL

20% azelaic + 10% resorcinol + 6% phytic + 3% tranexamic acid

Depigmenting peel that removes the accumulated melanin and regulates melanocyte activity. Its formula provides a perfect balance between efficacy and tolerance.



mesopeel melanoplus

5 x 5 mL

20% trichloroacetic acid + 4% kojic acid + 1% ferulic acid + tazarotene

Depigmenting peel for focal use to treat resistant hyperpigmentations. Self-neutralising. For medical use only.



c.prof 210 depigmentation solution 5 x 5 mL

Vitamin C + idebenone + NAG (n-acetyl glucosamine) + tranexamic

Transepidermal solution that regulates melanin production and removes the melanin responsible for visible pigmentation. It contains antioxidant agents that regulate melanin overproduction.



A Home products

melan tran3x concentrate & gel cream

30 mL / 50 mL

Home depigmenting programme with synergistic action formulae that act daily and progressively on hyperpigmentations, reducing dark spots. With tranexamic acid.



dermamelan® and laser®

In medium and high phototypes, the efficacy of laser is less precise and the risk of PIH is higher. In these profiles, dermamelan method is preferably recommended due to its profile of tolerance, efficacy and lower risk of relapses. Furthermore, in light phototypes the combination of laser treatment with dermamelan enhances treatment success, correcting and controlling melanin overproduction, offering a more intense and longer-lasting solution.

An evolution in the field of hyperpigmentation using the latest medical-scientific developments.

Formulae with synergistic and complementary action in the different targets of the pigmentation process.

Systems of vehiculation and penetration for maximum efficiency of the active ingredients.

The only depigmentation treatment with **all-in-one corrective**, **regulating action** at two levels.



1. Study in vitro on the inhibition of tyrosinase with [syn]pigmenTarget*. Unit of biotechnology of mesoestetic Pharma Group S.L. (INF265.UB.SEP.2020). 2. Enzyme assay on the activity of tyrosinase with melaphenone. Unit of biotechnology of mesoestetic Pharma Group S.L. (INF266.UB.MAY.2021). 3. Study on the dendricity of melanocytes stimulated with IBMX, an activator of the c.-MSH pathway, and treated with dermamelan* by microscopy (Olympus CKX41). Unit of biotechnology of mesoestetic Pharma Group S.L. (INF278.UB.MAY.2021). 4. Study on the genetic expression of TRP.2 (DCT by qPCR in culture of melanocytes stimulated with EL1 and treated with dermamelan*. Unit of biotechnology of mesoestetic Pharma Group S.L. (INF275.UB.MAR.2021). 5. Study on the genetic expression of COX. 2 by qPCR in culture of fibroblasts treated with dermamelan*. Unit of biotechnology of mesoestetic Pharma Group S.L. (INF275.UB.MAR.2021). 6. Study on the genetic expression of TIMP3 by qPCR in culture of fibroblasts treated with dermamelan*. Unit of biotechnology of mesoestetic Pharma Group S.L. (INF279.UB.MAY.2021). 7. Clinical study on the efficacy of dermamelan*. Medical Unit of mesoestetic Pharma Group S.L. 2020. 8. Skin Therapy Lett. 2016 Jan.21(1):1-7.



the element for skincare experts

mesoestetic Pharma Group, s.l. C/ Tecnologia, 25 08840 - Viladecans (Barcelona) Tel. +34 93 325 20 30 www.mesoestetic.com made in Spain