

*The long-lasting solution
for the treatment of deep wrinkles
and skin imperfections*

Derma...live

n a t u r e l l e m e n t j e u n e

An optimal solution:

Your know-how and our formula for an optimal aesthetic result

The desire of keeping a youthful appearance has strongly increased over the last years. To satisfy this demand, many filling methods to correct wrinkles and other cutaneous depressions of the face have been developed.

Resorbable implants constitute the basis of filling techniques but have a time-limited result. Injections must be regularly repeated in order to maintain the volume effect in the tissue.

Dermalive® is a non resorbable injectable implant designed for filling cutaneous depressions such as deep wrinkles and folds, correcting scars and for reshaping lip contours. Its use can achieve excellent results whose effects are prolonged in the time, thus ensuring greater satisfaction to your patients.

The originality of Dermalive® is not based on its components taken in an isolated way, but on their combination. The advantage of this patented formula is both an easy injection with slight pressure and the exact placement of flexible acrylic hydrogel particles due to the use of highly viscoelastic hyaluronic acid which serves as an ideal injection vector.

Both acrylic hydrogel and hyaluronic acid are widely used and clinically proven as implants in several medical applications since numerous years.

The high expectations in Medical Aesthetics can now be fulfilled with the use of Dermalive®. Since 1998, more than 150,000 patients worldwide have been successfully treated.

The main features of Dermalive® :

- No animal origin, no prior skin test
- No preservatives nor anaesthetics
- Highly biocompatible components
- Presented in a pre-loaded syringe
- Easy to inject
- Quick treatment, no downtime
- Long-lasting effect
- Natural-looking results

Examples of results achieved with Dermalive® :

Before



Nasolabial folds



Lip contours



Post-rhinoplasty correction



Scar correction

After



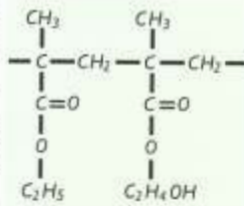
Courtesy of Dr Luitgard Wiest

A high tech concept

The combination of non-resorbable particles and a resorbable viscoelastic agent is a high tech concept which guarantees really long-lasting results. Despite the real advances achieved over the past 10 years^(4, 5, 12, 20, 23), the aim of the research was to improve the handling and to reduce the risk of complication. Dermalive® offers such improvements thanks to the association of two materials with unique qualities: acrylic hydrogel (40 %) and hyaluronic acid (60 %).

The Acrylic Hydrogel* : an inert, elastic and hydrophilic material, renowned for its high biocompatibility

From the acrylates family, the pHEMA-EMA is an inert material with high hydrophilic properties. Its name "hydrogel" is derived from its water content (26%) which is stable in the long term. Therefore it is better



accepted in the tissue and displays remarkable flexibility and elasticity with an elongation of around 400 % before breaking.

Thus Dermalive® is well integrated into the surrounding tissue and adapts to the deformations of dermis from the movement of the facial muscles.

The particle size (diameter > 45 µm) prevents any migration or degradation by the organism due to encapsulation of the particles through the fibroblasts^(21, 22).

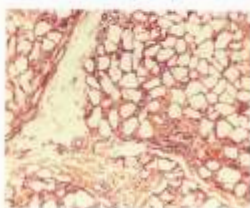
Hydrophilicity, chemical inertness and elasticity are the main features of a substance designed for implantation. They significantly improve cellular tolerance^(13, 20, 29), biocompatibility, and incorporation into the connective tissue⁽²⁷⁾.

They also result in a significant reduction of the risk of hyperfibrosis, bacterial adhesion^(15, 28) and plasma protein adsorption⁽²¹⁾.

These specific qualities of the acrylic hydrogel pHEMA-EMA lend to the product its good tolerance⁽²⁰⁾. The formation of new collagen fibres

around the particles is ensured by the tendency for fibroblast uptake⁽¹³⁾.

Before the launch of Dermalive®, the pHEMA-EMA acrylic hydrogel was already used in various fields^(6, 11, 12) and had achieved significant advances, e.g. in the treatment of extensive burn wounds^(2, 13), in neurosurgery⁽¹⁹⁾, in orthopaedic surgery⁽²⁴⁾, in plastic surgery⁽¹⁰⁾, in dentistry⁽¹⁴⁾, as well as in cataract surgery^(14, 18, 23). In particular, hydrophilic acrylic hydrogel pHEMA-EMA was found, in the long term, to be better tolerated in the eye due to its high biocompatibility than hydrophobic substances^(8, 14, 23) such as PMMA and silicone.



3 months after implantation of Dermalive® into the human dermis:
The inflammation is very moderate.
The flexible acrylic hydrogel particles are homogeneously distributed into the dermis.



2 years after implantation of Dermalive® into the human dermis:
"The encapsulation in the tissue was accompanied by mild fibrosis. The appearance of foam cells, macrophages or multinuclear giant cells as acute reactions confirms the successful integration of Dermalive into the tissue and its good biocompatibility."
Dr. Loedlin-Gebhammer D. ChR. - Mulhouse, Labi-Ristol.

The Hyaluronic Acid : an excellent vector of implantation

The hyaluronic acid is a glycosaminoglycane found in its natural form both in connective tissue as well as in the skin where it ensures their water supply. Its use is increasing for wrinkle filling and confirms its good tolerance.

Obtained here by biosynthesis, it is of non-animal origin. Therefore an immediate treatment with Dermalive® can start without any prior skin test.

Due to its viscoelastic and fluid properties, hyaluronic acid is an ideal injection vector⁽⁷⁾. After the injection, it limits the inflammatory reaction and maintains the even distribution of particles into the dermis. It has been slightly cross-linked in order to slow down its cutaneous resorption^(1, 2).

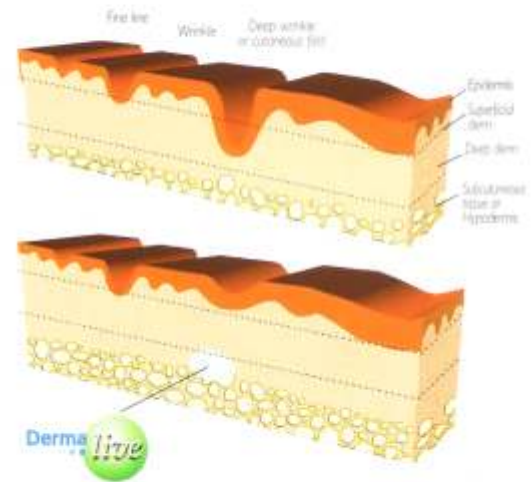
* pHEMA-EMA or Copolymer of hydroxyethylmethacrylate (HEMA) and of ethylmethacrylate (EMA)

The treatment and its mechanism of action

The linear withdrawing technique must be used. The injection of Dermalive® is almost painless when using the provided 27G½ needle.

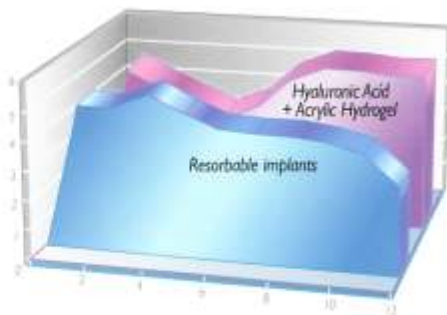
However, local anaesthesia is recommended for patients more sensitive to pain and depending on the treated area (eg: lip contours).

Once the injection is performed, the treated area has to be massaged in order to ensure an even distribution and a perfect integration of the particles into the surrounding tissue. The patient can be treated in the shortest time and afterwards resume his or her usual social activities. Dermalive® (particle size between 45 and 65 µm) has to be injected into the junction between subcutaneous tissue and dermis.



Implantation of Dermalive®

Final effect: Particles (40% of the implant) + soft-tissue augmentation (depending on the patient)



Thanks to hyaluronic acid, the hydrogel particles can be injected accurately into the appropriate deep dermal layers. Fibroblasts will adhere to the particles and form new collagen which will contribute to the volume augmentation of the treated area. Overcorrection must be avoided.

Comparison of the evolution in the time of the filling effects.
Resorbable implants / Hyaluronic Acid + Acrylic Hydrogel

This integration process of the hydrogel particles in the tissue is complete after three months at the earliest and provides a really long-lasting result.

Because the augmentation in tissue volume and the degradation of hyaluronic acid varies depending on individual patients, the treated area, and the deepness of the cutaneous depression to correct, one or two further treatment sessions may be considered for achieving the expected result. In any case, it is necessary to respect a minimum three-month period between two injection sessions.

Recommendations

As for any medical application, the use of skin implants involves to respect precautions before use, contraindications and the knowledge of the risk of adverse reactions. All information relative to the use and characteristics of the products are contained in the packing insert.

Dermalive® should only be used by medical practitioners who perfectly master the filling techniques for wrinkles by injection, and who are acquainted with the characteristics (composition, mechanism of action, contraindications, precautionary measures) of this product.

Nevertheless, **the best of the guarantees** for avoiding any complication remains the **know-how of the practitioners** and the **respect of the rules** of implantation^{(2), (3)}.

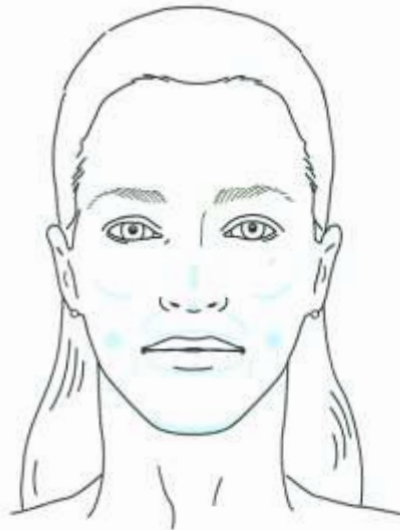
1. Informing the patients about the indications of the product, the expected results, the contraindications, but also about the potential undesirable effects and their treatments.

2. Preliminary clinical examination of the patient and respect for the contraindications, the precautions before use and the directions for use.

Indications

Dermalive® represents a good alternative to resorbable injectable implants. The filling effect is precise, harmonious and looks natural.

Dermalive® is used for the **long-lasting correction of deep** cutaneous depressions.



- > Reshaping lip contours
- > Filling nasolabial and bitterness folds
- > Correcting midly cheeks, cheekbones and chin
- > Correcting mildly after Rhinoplasty
- > Scar correction

Clinical Experience

Preliminary Results :

A series of eight independent clinical trials was conducted in five countries in order to evaluate the immediate tolerance of Dermalive® and the satisfaction of the patients after 3, 6 and 9 months.

In 417 treated patients:

- The efficiency was considered to be very satisfactory or satisfactory in more than 88 % of the cases.
- Only one syringe was sufficient in 72 % of the cases
- A very small proportion of transient immediate reactions was observed.

Long-term Clinical Results:

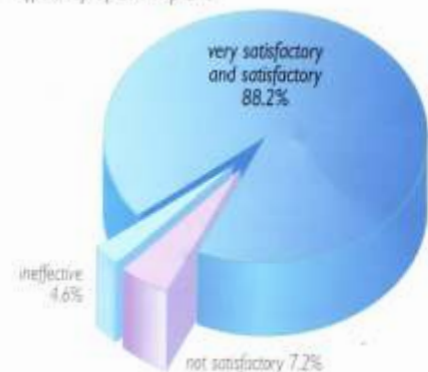
A clinical study conducted in 455 patients during more than 3 years⁽³⁵⁾ has shown the very good tolerance and the efficiency of Dermalive®. Aesthetic results have been evaluated as satisfactory by the patients in 88% of the cases. No necrosis, no immediate hypersensitivity reaction and no case of implant migration have been reported.

However, the occurrence of an inflammatory reaction between the recipient tissue and the implant under the form of a delayed hypersensitivity or a foreign-body granuloma is possible with all resorbable

and non-resorbable implants several months or even years after the injection^(35, 36, 37, 38).

With a five-year follow-up, Dermalive® has recorded a global complication rate of 2 per 1,000 (0,2%) in December 2003. Usually, these complications manifest themselves as nodule, oedema or induration at the injection site between 6 to 12 months afterwards. Granulomas are generally sensible to medical treatments. The medical device reporting data analysis⁽³⁴⁾ has shown that compliance with indications, contraindications and precautions of use is the best way for preventing the observed complications^(34, 35).

Efficiency of the implant



* For the sake of clarity and to avoid any complication and misuse of our products, the latest results of our medical device reporting are constantly available. For this purpose, please contact directly our medical device reporting department by e-mail: vigilance@dermatech.fr

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Presentation and storage conditions



Each pack contains :

- 1 sterile and pre-filled syringe of 0.8 mL (single use)
- 2 sterile 27G_{1/2} disposable needles
- Packaging insert
- A set of labels bearing the batch identification number for traceability.

To be stored in the refrigerator between 2°C and 8°C, protected from frost and light.
To be taken out of the refrigerator at least 2 hours before using.



Manufactured by



Distributed by

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Derma *deep*

n a t u r e l l e m e n t j e u n e

***Injectable facial implant
for soft-tissue augmentation***

***Remodelling facial contours
in a lasting way without surgery***

Dermadeep® is a suspension of flexible and non-resorbable fragments of **Acrylic Hydrogel*** in a sterile non-pyrogenic and physiological solution of slightly cross-linked **Hyaluronic Acid** of non-animal origin.

The components of **Dermadeep®** have been widely used and clinically proven as implants in various medical applications since numerous years.

Dermadeep® is an ideal soft-tissue augmentation system, which saves time instead of harvesting fat or using solid implants.

>>> Its main features are:

- No animal origin, no prior skin test
- No preservatives nor anaesthetics
- Highly biocompatible components
- Presented in a pre-loaded syringe
- Easy to inject
- Immediate treatment (around 30 min)
- Long lasting effect
- Natural looking results

>>> Indications

Dermadeep® is an excellent alternative to lipofilling or surgery for the following indications:



- > Volume augmentation of cheeks, cheekbones and chin
- > Filling very pronounced nasolabial folds and deep wrinkles
- > Improving final outcome of Facelift
- > Rhinoplasty correction
- > Scar correction

>>> How to use it?

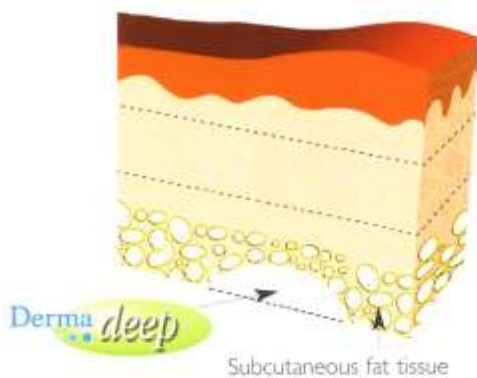
Using **Dermadeep**[®] is a relatively simple and quick process.

It has to be injected into the **epiperiosteal layer or the hypodermis, by using the linear withdrawing or criss-cross technique**, in order to create a volume in the desired area by accumulating fragments of acrylic hydrogel.

After the injection, the treated area has to be massaged for an even distribution and a perfect integration of the particles into the surrounding tissue.

Do not overcorrect.

>>> How it works?



Dermadeep[®] is a semi-permanent injectable implant. The hyaluronic acid serves as a vector making the injection easy and reliable thanks to its viscoelastic and fluid properties: the implantation and the placement of the particles are precise. The hyaluronic acid will disappear within a few weeks, limit the inflammatory reaction and maintain an even distribution of the particles. Fibroblasts will adhere to the particles and form new collagen which will contribute to the volume augmentation of the treated area. The final result will be achieved by combining the size of the particles together with the

volume created by new connective tissue. Thanks to their size (between 80 and 110 μm), the particles will not migrate. It is essential to **wait at least 3 months before reinjecting** (touch-ups) in order to allow the natural healing process.

Results of independent clinical studies have confirmed the good tolerance and the safety of **Dermadeep**[®].

Available since 1999, **Dermadeep**[®] has been already used successfully for treating more than 10,000 patients and has proven to be safe and efficient for soft-tissue augmentation.

>>> Patient's Cases:

Before



After



Courtesy of Dr Woffles T.L. Wu

>>> Brief comparison

	Autologous fat	Facial implant	Dermadeep®
Easy to obtain	No	Yes/No	Yes
Can be used immediately	No	Yes/No	Yes
Easy to implant	No	No	Yes
Anaesthesia	General/Local	General/Local	Cream/Local
Incision	Yes	Yes	No
Local pain	Yes	Yes	No
Pigmentation	Yes	Yes	No
Antibiotics	Yes	Yes	No
Donor site problems	Yes	-	-
Downtime	Yes (1-14 days)	Yes (1-8 days)	No
Infection risk	2%	4%	No
Long-lasting effect	No	Yes	Yes

>>> Summary

Dermadeep® is the unique injectable implant suitable for subcutaneous implantation which will enable you to sculpt and restore youthfulness to facial contours for a long-lasting aesthetic correction. This is a very good alternative to offer to your patients who do not want to have surgical procedures.

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Presentation and storage conditions

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For more technical information, please contact our Marketing Department.



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