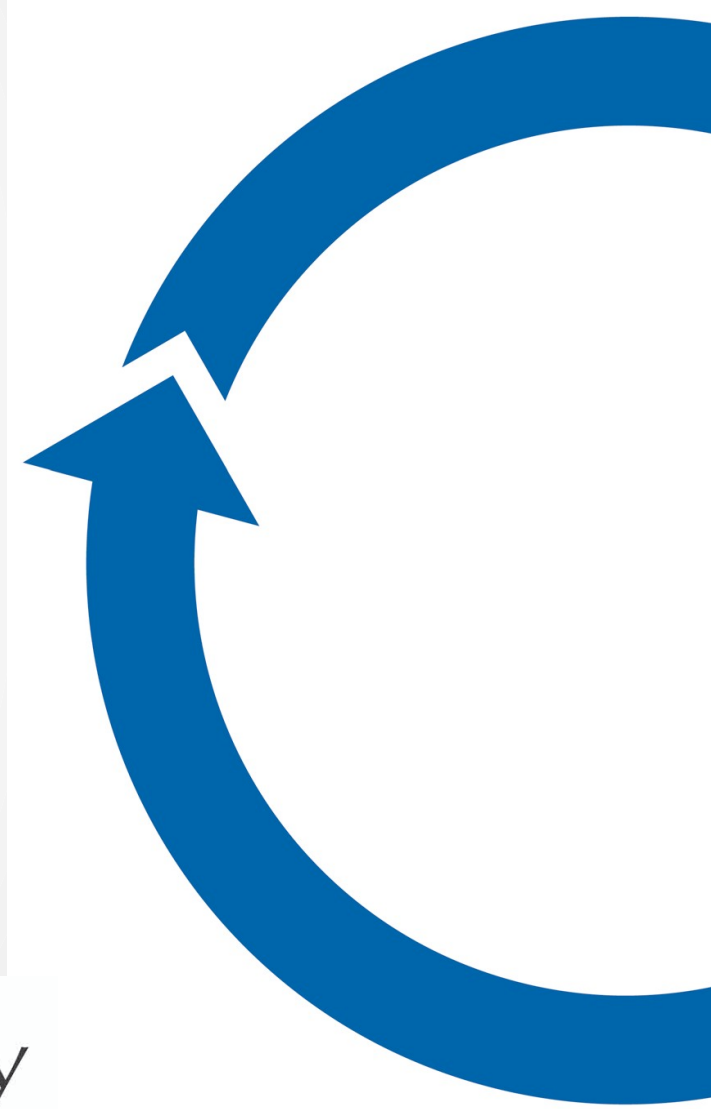
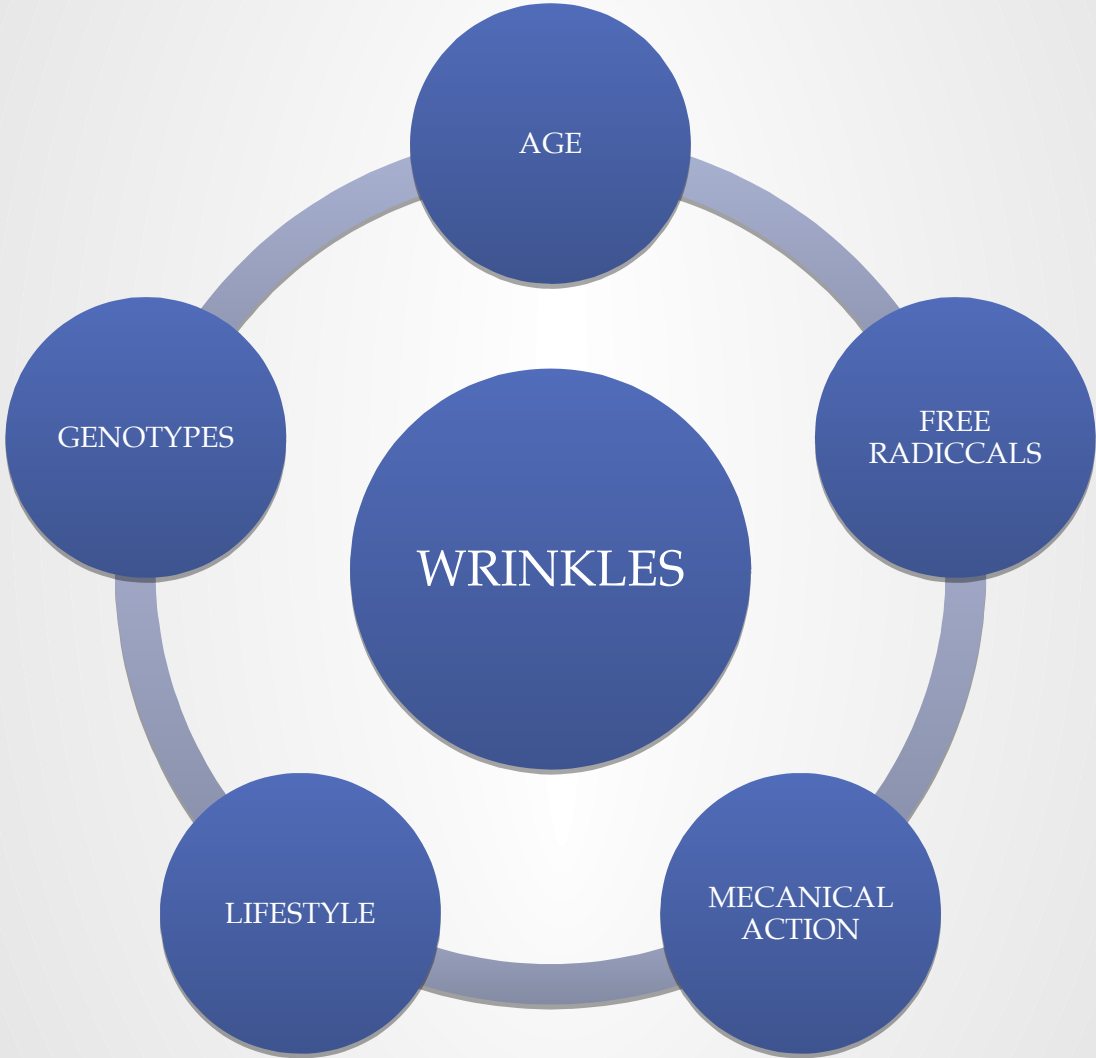




ROUTIN



# SKIN AGING



# EFFECTS

DEGENERATION OF THE  
ELASTIC NET

DECREASE OF COLLAGEN

EPIDERMAL CELLULAR  
ATYPIA

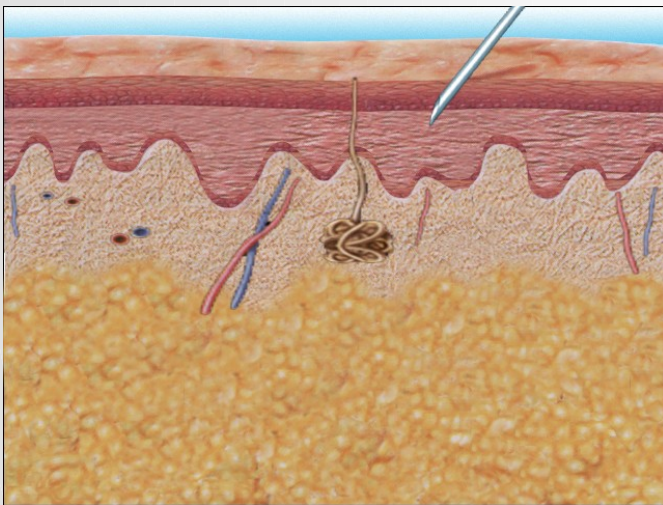
FLATTENING OF THE  
DERMAL-EPIDERMAL  
JUNCTION

HYPERPIGMENTATION

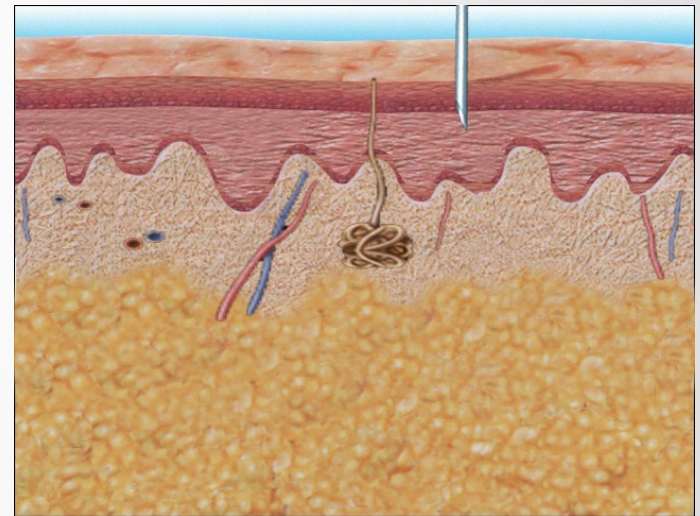
PHOTOCHEMICAL EFFECTS  
OF EXPOSURE TO  
SUNLIGHT

# MESOTHERAPY & M.I.I.T.

Using a small amount of active ingredients injected into the superficial dermis (without visible papules).



Angle of 45 ° to the skin. Depth of the superficial dermis.



Perpendicular angle of injection. Depth of the superficial dermis.

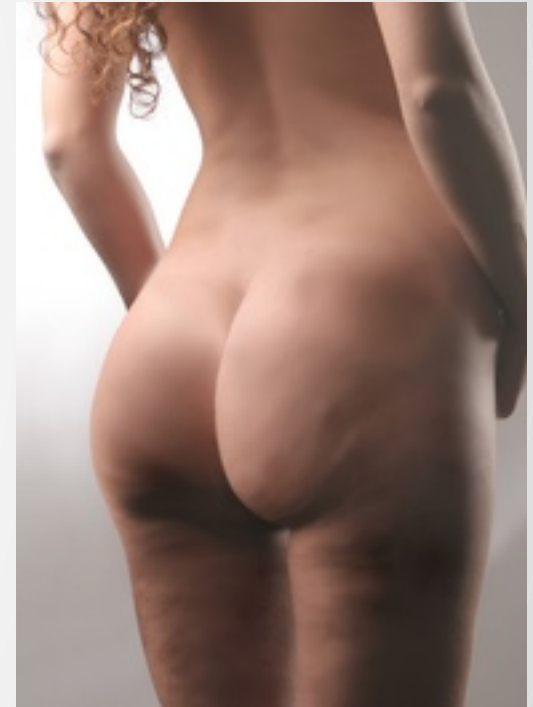
# HETEROLOGOUS REVITALIZATION

Vitamins, aminoacids and other essential substances are used to return health to the tissue.

## MESOTHERAPY & M.I.I.T.



Face



Body

# AUTOLOGOUS REVITALIZATION

Recently were introduced autologous biorivitalization techniques using the plasma (**platelets and leukocytes of patients**).

**The autologous regeneration of tissues with Outin** involves the use of bio-activated plasma enriched with the nucleotides of DNA (obtained by synthesis) it works as a structure and as a container of growth factors released by platelets.



# AUTOLOGOUS REVITALIZATION

The technique consists in drawing a complete blood sample (20-30 cm<sup>3</sup>), centrifuges it, for separating the corpuscular part from the liquid part that contains the platelets in which the latter are activated, restore the concentration of calcium ions, to obtain the degranulation and then the release of growth factors.

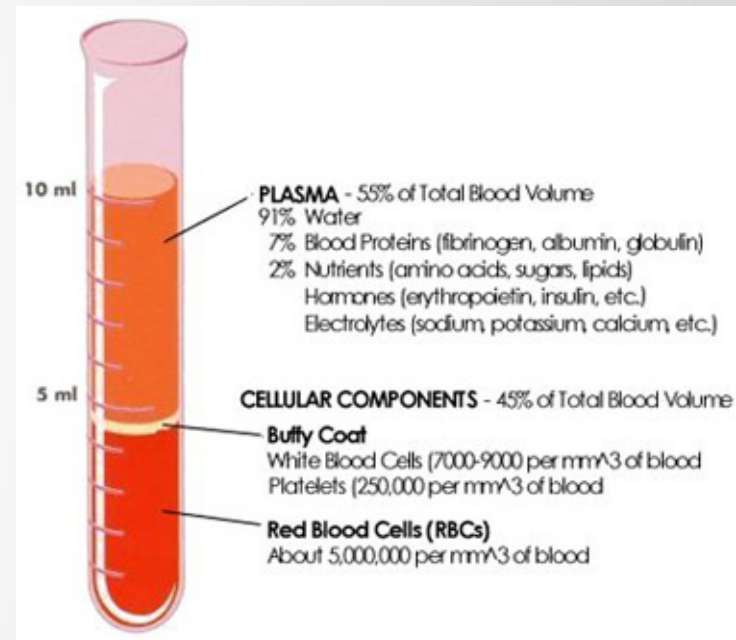


# AUTOLOGOUS REVITALIZATION

The plasma obtained in this way is injected in a intradermal / hypodermis, it is acting as a matrix container and as well as **growth factors** container.



A **three-dimensional network of fibrin** is generated when the growth factors produced after the proliferation and differentiation by platelets, leukocytes and stem cells.



The purpose is the rejuvenation of the skin



# PLATELETS AND GROWTH FACTORS



# PLATELETS AND GROWTH FACTORS

- **Growth factors** are small biologically active protein fragments of the cytokines group
- They carry out their action by binding to **membrane receptors**
- They are the **biological mediators** that regulate the regeneration and repair the tissue functions (**chemotaxis, mitosis, angiogenesis, cell proliferation and differentiation, extracellular matrix synthesis**).

# KNOWLEDGE-HISTORY

The technique, developed in 2003 by [Prof. J. Víctor García](#) [Universitat Autònoma de Barcelona](#) in Spain, it has now spread throughout the world for important clinical responses subsequent to treatment.

For some time, the use of platelet growth factors is proposed in various areas of medicine. Numerous scientific publications report the results in dental, orthopedic surgery, maxillofacial surgery and plastic surgery. Have recently been proposed works also in the rejuvenation of the skin.

Among the first to create protocols of separation and use of platelet growth factors we [Dr. Anitua](#) who has published several papers in time.

All papers published concerning the use of platelet growth factors for topical application on the wound.

Growth factors have been discovered in 1986 by [Prof. Rita Levi - Montalcini](#) and [Prof. Stanley Cohen](#). These two scientists have received, for this discovery, the Nobel Prize.

Since 1986, much has been said about the growth factors.

NOW IF WE DO A SEARCH ON GOOGLE APPEAR 121.000000 ENTRIES.

# KNOWLEDGE-HISTORY

The preparation of platelets has been used in medicine for several purposes:

- Chronic ulcer in the lower part of the leg
- Dental Medicine and periodontal surgery
- Surgery Colo-rectal fissure and fistula-in-anus
- Ophthalmology
- Sports Medicine
- Surgery: orthopedic and arthroscopic, oral and maxillofacial, cardiac)
- Other: veterinary in-vitro biology / cell culture

# NUCLEOTIDE DNA

THE REAL INNOVATION OF **OUTIN** CONSISTS IN THE ACTIVATION OF PLATELETS WITH NUCLEOTIDES.

NUCLEOTIDE DNA AND AMINOACIDS

- Is the basic principle of all cellular processes,
- Increase the process of protein synthesis
- Improve the metabolism of cells
- Increase the replication of cells
- Promote cell renewal

OUTIN  
Top

K-surgery  
medical



# SUGGESTIONS

## WRINKLE TREATMENT

- IMPROVES HEALING / CICATRISATION OF DAMAGED SKIN THANKS TO THE VISCO-STATIC PROPERTIES OF RELIFE

## ACTIVE AND ENDOGENOUS HYDRATION

- THE ENDOGENOUS HYALURONIC ACID HAS A SIGNIFICANT HYDROSCOPIC POTENTIAL.
- IT FILLS EQUALLY THE SPACE BETWEEN THE COLLAGEN FIBERS OF THE CELL MATRIX REDUCING THE LOSS OF WATER

## OPTIMIZATION OF BRIGHTNESS / RADIANCE

- CONTRIBUTES TO THE FORMATION OF NEW BLOOD VESSELS IN VIVO

## STIMULATION OF CELL GROWTH

- PROLIFERATION OF YOUNG AND SENESCENT FIBROBLASTS



# INDICATIONS

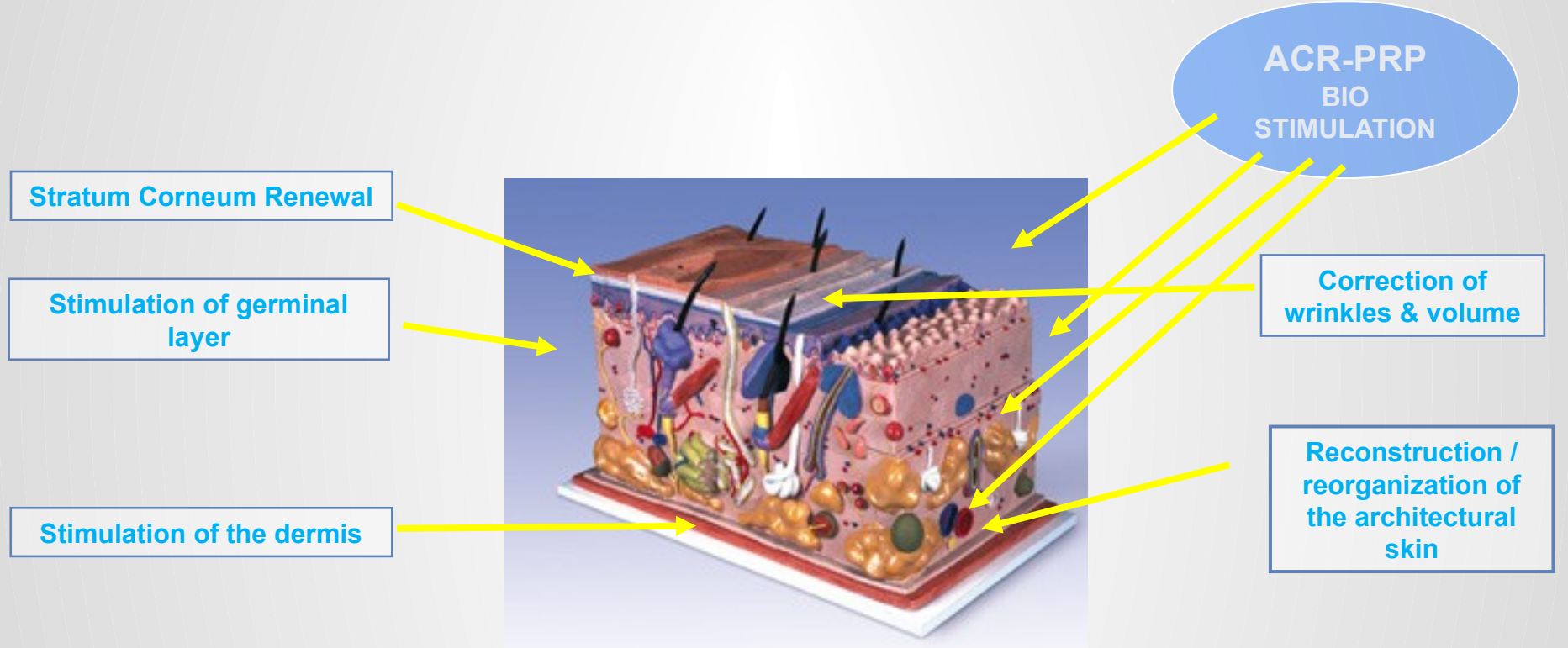
Anti-aging mesotherapy for biorivitalization

Hydration of the tired and dull skin, anti-wrinkle treatment

Densification of mature skin or of not-compact skin.

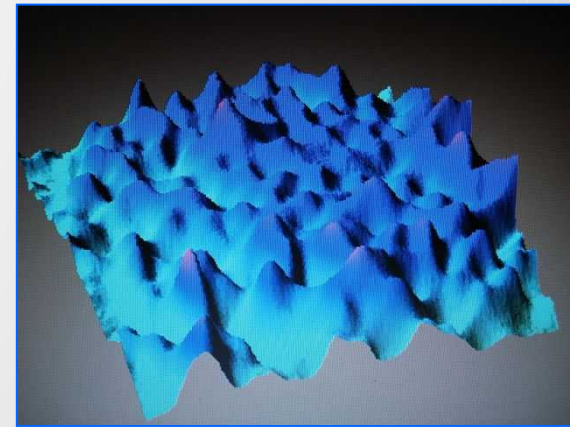


# AUTOLOGOUS REGENERATION OF TISSUES



# INDICATIONS ON ATM & NUCLEOTIDES

- Skin renewal
- Repair cellular damage from UV rays
- Treating scars and skin lesions (ex post acne)
- Photoaging
- Stressed, mature, hypoxic skin
- Skin before and after the menopause
- Stimulates cell renewal



# INDICATIONS

The technique is used when it is necessary to raise the profile of the skin:

face, neck, décolleté, arms and hands, inner thighs and hair loss.

It is used to obtain a biorivitalization with skin firmer, flexible, hydrated which may persist over time.

**A SESSION EVERY 6-8 MONTHS**

# OUTIN KIT



## Outin sampling kit

- 4 Test tubes with sodium citrate
- 1 Drawing butterfly + standard holder with needle
- 1 Sterile towel (50x50 cm)
- 2 Sterile syringes
- 2 Mesotherapy needles (30G)
- 2 Needles (21G)
- 1 Disinfected wipe
- 2 Sterile gauzes
- 1 Packaged plaster

# OUTIN TOP



## Outin Top Kit

Sterile, for topic use only, cosmetic product.  
Exlotable through electroporation.

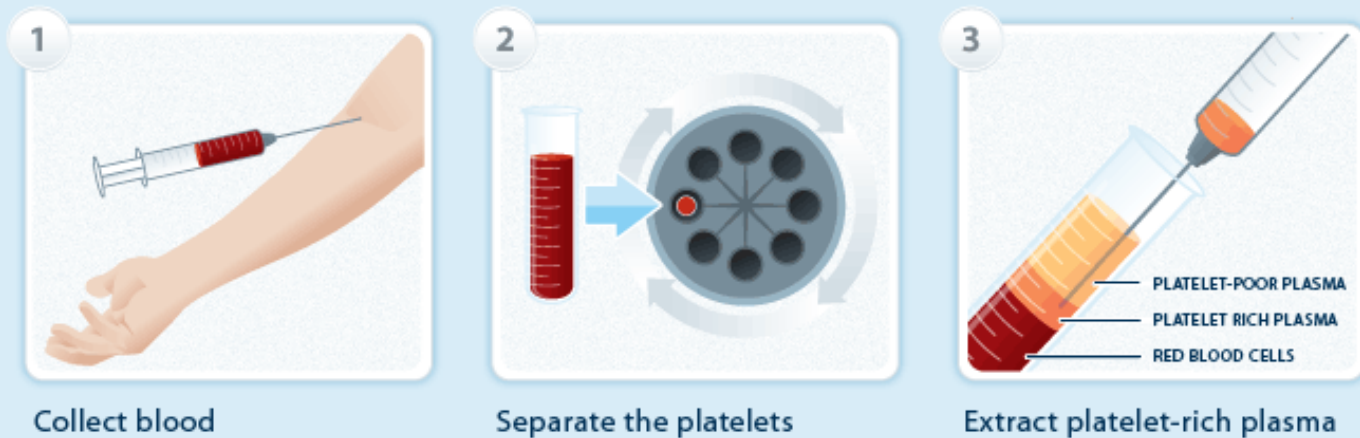
## 2 Vials with

Aqua – Water  
Calcium Chloride  
Cytosine  
Thiamine  
Adenine



- ④ Blood samples (4/16 ml max) – with OUTIN KIT
- ④ 1000 rpms x 6 minutes
- ④ Separation
- ④ Enrichment
- ④ Remix: Activation of platelets with 0.5 ml of OUTIN TOP
- ④ intradermal injection

## PROCESS OF PRP THERAPY



# WORKING PROTOCOL

## START

1 session

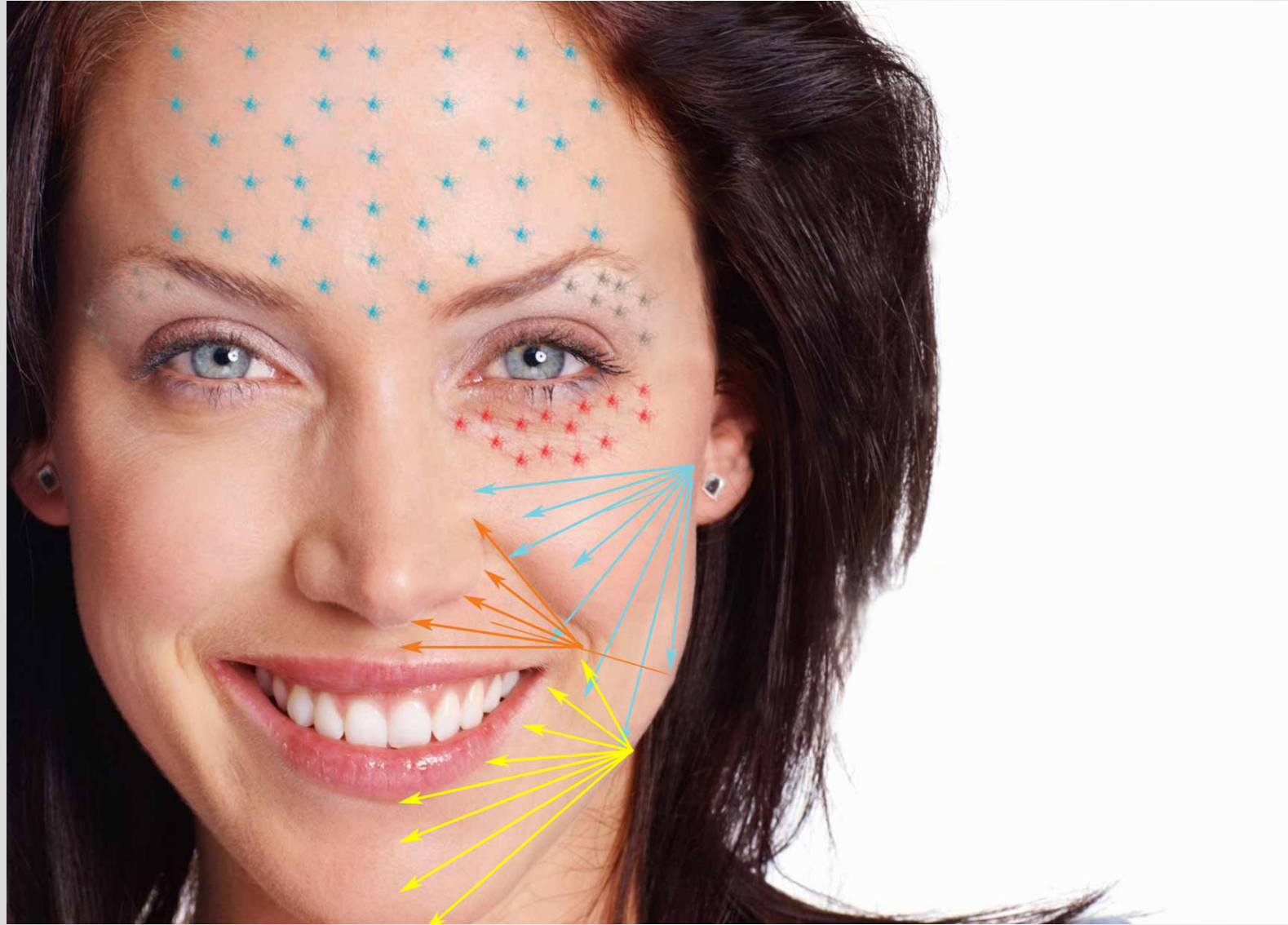
## DURATION OF TREATMENT

A session lasts from fifteen to thirty minutes depending on the skin surface to treat

## MAINTENANCE

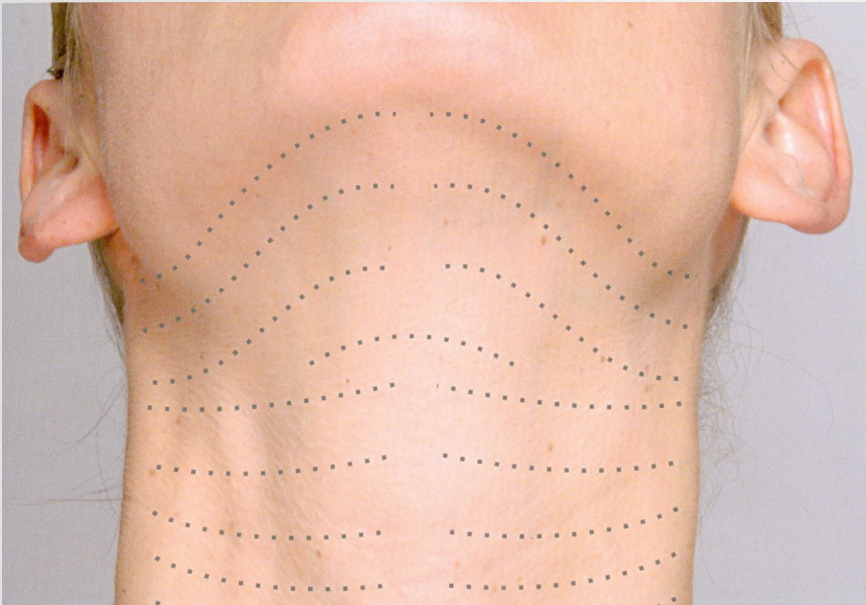
1 session every 6 - 8 months

# TREATABLE ZONES



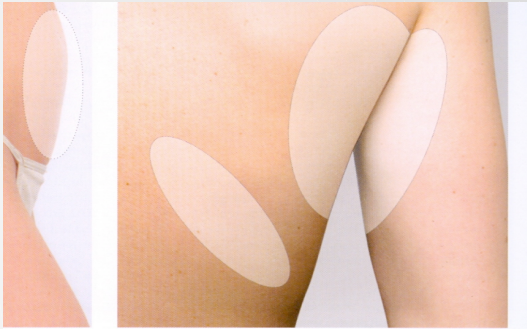


# TREATABLE ZONES





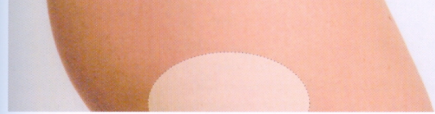
# TREATABLE ZONES



Fettdepots und Behandlungszonen Oberarm, Achsel, love-handles



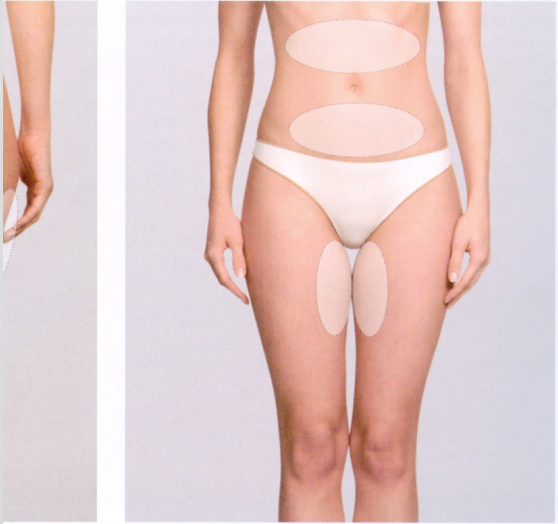
Fettdepots und Behandlungszonen Oberarm, Achsel, love-handles



Fettdepots und Behandlungszonen Hüfte, Bauch, Oberschenkel



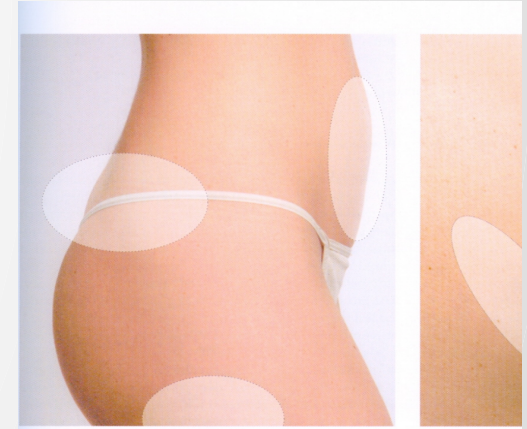
Fettdepots und Behar



Fettdepots und Behandlungszonen Ober- und Unterbauch, Oberschenkel



Fettdepots und Behandlungszonen Oberschenkel- und Knieinnenseiten, Reithose, Po-Banane



Fettdepots und Behandlungszonen Hüfte, Bauch, Oberschenkel

Fettdepots und Behar

nseiten, Reithose,

Fettdepots und Behar

# CONTRAINDICATIONS

## RELATIVE CONTRAINDICATIONS

Glogau classification type IV

Acute herpes infections

No real expectations of patients

Patients who have intolerance or atopy  
(nucleotides)

## ABSOLUTE CONTRAINDICATIONS

Hepato-renal diseases significant

HIV-positive patients

Immunosuppression significant

Emotional instability or mental illness

Ehlers-Danlos

Sclerodermis or collagen vascular disease

Patients who are allergic to nucleotides





# OTHER CONTRAINDICATIONS

Syndrome with abnormalities of platelets function

Thrombocytopenia

Ipfibrinoginemia

Hemodynamic instability

Sepsis

Acute or chronic infections

Chronic liver disease

Anticoagulant therapy



## SIDE EFFECTS

- Hematoma (transient state)
- The place of the injection could be violet due to the presence of platelets (without hematoma)
- Light swelling



OUTIN

THANK YOU FOR YOUR KIND ATTENTION