

# *Cellular Reprogramming applied to Aesthetic Regenerative and Antiaging Medicine*

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*Cellular Reprogramming applied to Aesthetic Regenerative  
and Antiaging Medicine*

## What do these disciplines have in common?

- AESTHETIC MEDICINE
- REGENERATIVE MEDICINE
- ANTIAGING MEDICINE
- CELLULAR REPROGRAMMING

## DEFINITION OF AESTHETIC MEDICINE

Aesthetic medicine is a medical branch, with an internal nature, which deals with improving the quality of life.

Aesthetic medicine includes multidisciplinary treatment for the preventive, corrective, restorative and rehabilitative action of every part of the human body.

## DEFINITION OF REGENERATIVE MEDICINE

*Regenerative medicine is a branch of medicine that, instead of treating the symptoms of a condition, trauma or disease, aims to replace, rebuild or repair tissues, cells and organs. Regenerative medicine employs molecular biology and stem cell research to stimulate the body's repair systems to effectively heal tissues and organs that are normally impossible to repair.*

## DEFINITION OF ANTIAGING MEDICINE

*What anti-aging medicine aims to do is not to tackle the onset of the disease and lengthen a person's period of illness but to prevent early avoiding chronic degenerative diseases and prolonging the years of health and physical efficiency.*

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## DEFINITION OF THE EPIGENETIC CODE

*The epigenetic code is the genetic code that is present in its entirety in the embryo when life is formed.*

*In adult individuals it is divided into various organs and systems, and in each organ there is only that part of the epigenetic code that serves to regulate the gene expression of the cells present in a specific organ. The research on the function of embryonic differentiation factors has turned not only to the study of cellular reprogramming in tumors, but also to the aging processes and cellular degeneration in degenerative diseases.*

## DEFINITION OF CELLULAR REPROGRAMMING:

*With cellular reprogramming we mean the biological effects of small molecules capable of triggering the regenerative potential in human tissues, which induce cell differentiation (reprogramming) for tissue repair and regeneration, giving them unlimited applications in the medical field..*

IN THIS COURSE, WE WILL SEE HOW CELLULAR  
REPROGRAMMING CAN BE EFFECTIVELY APPLIED IN ALL  
THESE MEDICAL DISCIPLINES.

LET'S START WITH A LITTLE THEORY

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# *Reprogram Cells*

The physiological reprogramming mechanism of the cells is present, in perfect balance, in the human organism at its embryonic stage, which is therefore able to reconstruct the life cycle of the single cell. Unfortunately, over the years, this balance changes and the cells decay and die from natural or pathological causes. Now it is possible to reproduce this regeneration mechanism also in adult organisms, counteracting their decay or degeneration thanks to growth and differentiation factors.

It has been shown that the differentiation factors of stem cells taken from the Zebrafish egg, which has more than 90% of proteins in common with those of humans, are able to normalize the cell cycle and reprogram the cells in a physiological way (without alterations genetics).

# *Reprogram Cells*

Reprogramming is a molecular biology procedure that involves a specific intervention on the basic biological program which is DNA. This intervention consists in restoring the nucleus of differentiated somatic cells to an undifferentiated condition, without affecting its functionality.

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# *Epigenetics*

Epigenetics is a branch of genetics that deals with inheritable phenotypic changes from a cell or organism, in which no genotype variation is observed.

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# *Epigenetics and cellular diversity of an individual*

The different mechanisms of epigenetic regulation are responsible for the cell diversity of an organism in which all cells have the same genome, but have different phenotypes and different gene expression profiles

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# *The Epigenetic Code or Epigenome determines the cellular phenotype*

The epigenome decides whether a gene must be off or on in every single cell and this process makes cellular differentiation possible in which all the cells of an organism have the same DNA at the beginning, but have a different phenotype.

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# *Epigenetics and cell differentiation*

In fact, cell differentiation consists of a specific and selective epigenetic regulation, which decides which genes must be turned on and which should be turned off, so at the end of the process all cells have the same genome, but a different phenotype.

# *Materials and methods*

- The differentiation factors extracted from Zebrafish are used during organogenesis
- (galenic product)
  
- Molecular application of Zebrafish extracts using the Criopass Therapy technique
- (Molecular Laser applicatio)

# *Zebrafish*

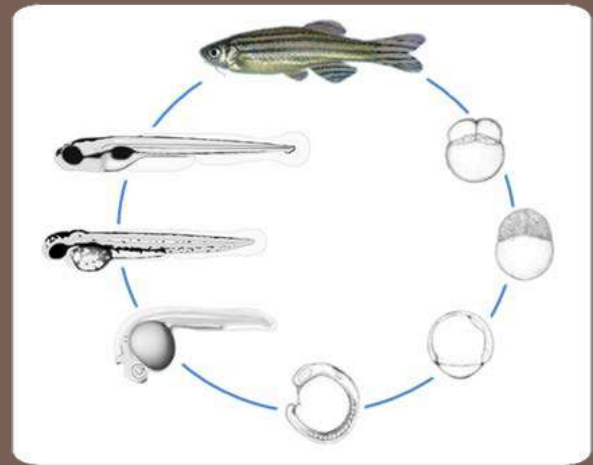


The Zebrafish, or *Danio rerio*, is a freshwater fish that in recent years has become the most used animal model in the world in laboratory studies, thanks to its particular characteristic. At specific moments in the growth of Zebrafish embryos, using sophisticated techniques, it is possible to obtain the entire epigenetic code capable of reprogramming human cells and differentiating them.

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# Zebrafish



“GROWTH and DIFFERENTIATION FACTORS have significant biological activity, which is essential for maintaining cellular health. Some proteins are important for the life of mitochondria, others have the function of regulating the cell cycle, the immune response and so on. Therefore, the biological molecules of ROE EXTRACT are essential to keep the cells of our body in optimal health conditions and revitalize the tissues, minimizing the phenomena of aging..”

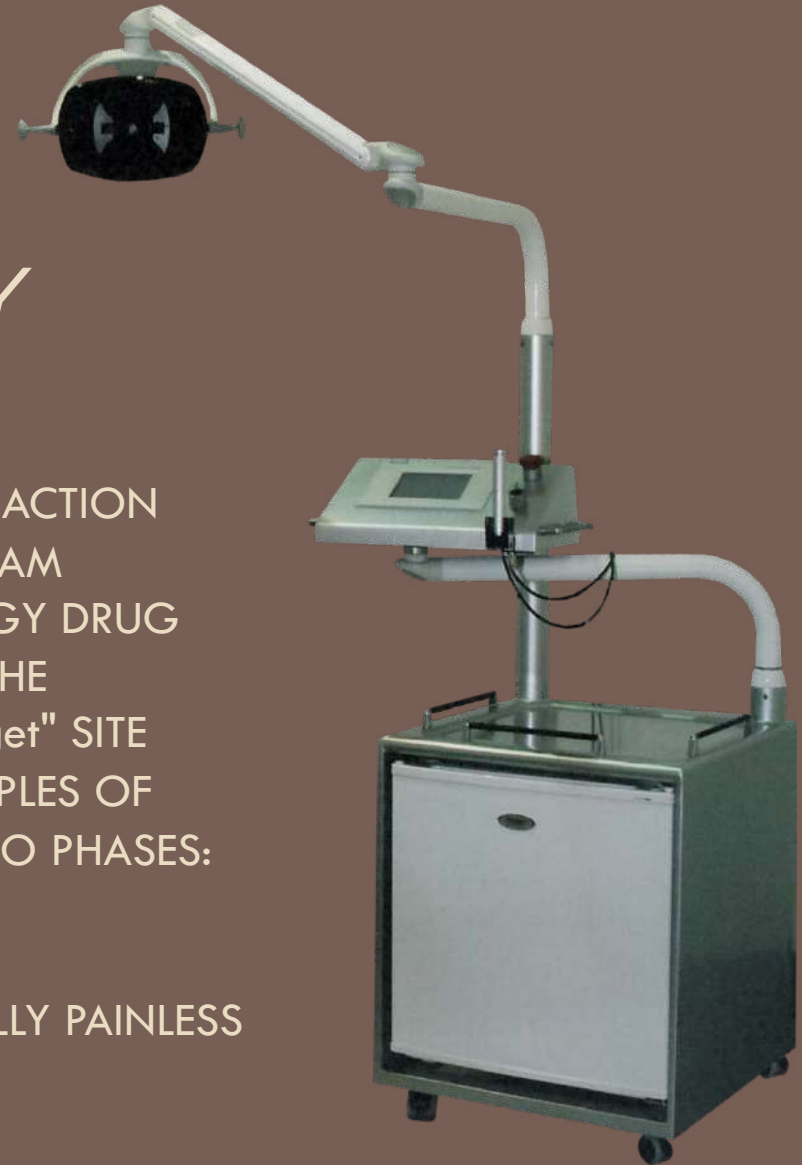
It has been shown that the differentiation factors of stem cells taken from the Zebrafish egg, which has more than 90% of proteins in common with those of humans, are able to differentiate the cell cycle and reprogram the cells in a physiological way (without alterations genetics).

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# MOLECULAR LASER *CRYOPASS THERAPY* *HOW DOES IT WORK :*

IT IS AN INSTRUMENT THAT USES THE KINETIC ACTION GENERATED BY THE PHOTONS OF A LASER BEAM (wavelength 635 nm) TO "charge" WITH ENERGY DRUG MOLECULES FROZEN AT  $-18^{\circ}$  C, FAVORING THE TRANSDERMAL PENETRATION UP TO THE "target" SITE  
CRYOPASS THERAPY IS BASED ON THE PRINCIPLES OF QUANTUM PHYSICS AND TAKES PLACE IN TWO PHASES:  
FIRST PHASE - "molecular excitation"  
SECOND PHASE - "molecular diffusion"  
THE DRUG PENETRATION TREATMENT IS TOTALLY PAINLESS



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# HOW TO USE IT

AS THE FIRST OPERATION, THE DRUG THAT IS INTENDED TO BE CARRIED OUT IS DISSOLVED IN THE "Laser Ice" CRYOAPPLICATOR CONTAINING A "gel" DESIGNED SPECIALLY TO HELPS THE DISTRIBUTION OF THE DRUG

THEREFORE AND FREEZES AT  $-18\text{C}^{\circ}$

THERAPY IS PERFORMED BY CONNECTING THE FROZEN CRYO APPLICATOR TO THE LASER SOURCE TO PERFORM THE APPLICATION TRANSDERMALIY



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# DRUG PENETRATION

FIRST PHASE "molecular excitation"  
THE CRYO APPLICATOR IS APPLIED  
DIRECTLY ON THE SKIN IN THE  
ANATOMICAL DISTRICT TO BE TREATED  
THE BODY HEAT MELTS THE FROZEN  
CRYO APPLICATOR RELEASING THE  
ENERGY "trapped" IN THE DRUG  
MOLECULES THAT PASS THE SKIN  
BARRIER CONCENTRATING UNDER THE  
DERMA



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# DRUG PLACEMENT

SECOND PHASE "molecular diffusion"  
THE DRUG MOLECULES CONCENTRATED IN  
THE EXTRACELLULAR MATRIX ARE AGAIN  
"excited" USING A SECOND SCANNING LASER  
TO OBTAIN AN EXPLANATION OF THE DRUG  
THROUGH THE TISSUES UNTIL THEY REACH  
THE "target" SITE

A SPECIFIC SOFTWARE AUTOMATICALLY  
ADJUSTS ALL PARAMETERS TO OBTAIN THE  
DRUG CONCENTRATION IN THE SELECTED  
ANATOMICAL DISTRICT



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# MOLECULAR LASER - QUANTUM PHYSICS

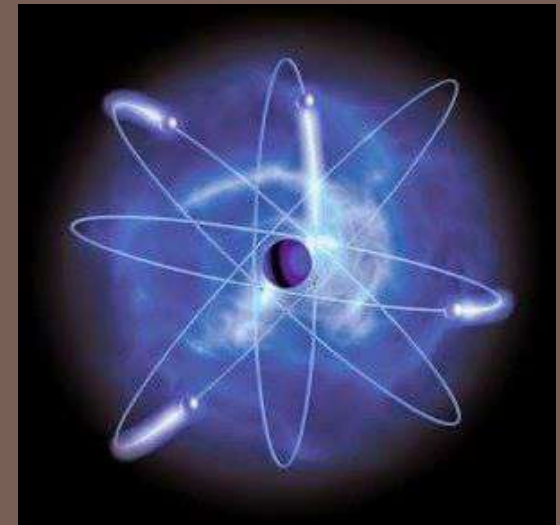
QUANTUM PHYSICS IS THE STUDY OF VERY SMALL OBJECTS, SUCH AS ELECTRONS AND ATOMS, CONSEQUENTLY QUANTUM MEDICINE DESCRIBES THE INTERACTION OF THEM WITH THE ELEMENTARY STRUCTURES OF THE HUMAN BODY

THE UNIT OF MEASUREMENT: "quantum" OF LIGHT IS THE "photon", "quantum" OF MATTER IS "the electron".

*"Quantum" CAN BE BOTH WAVE AND PARTICLE*

*QUANTUM PHYSICS DOES NOT FOLLOW THE TRADITIONAL RULES OF CLASSICAL PHYSICS, IN THE INFINITELY SMALL NOTHING IS CERTAIN, BUT ONLY PROVABLE, OR YOU CANNOT KNOW WITH PRECISION WHERE A "quantum" IS OR WHERE IT IS GOING, BUT YOU CAN PROBULD IT ', AS FOR EXAMPLE THE PROBABILITY THAT AN ELECTRON FOLLOWS A CERTAIN TRAJECTORY OR A PHOTON IMPACT WITH AN ELECTRON CAUSING*

*"A quantum leap"*



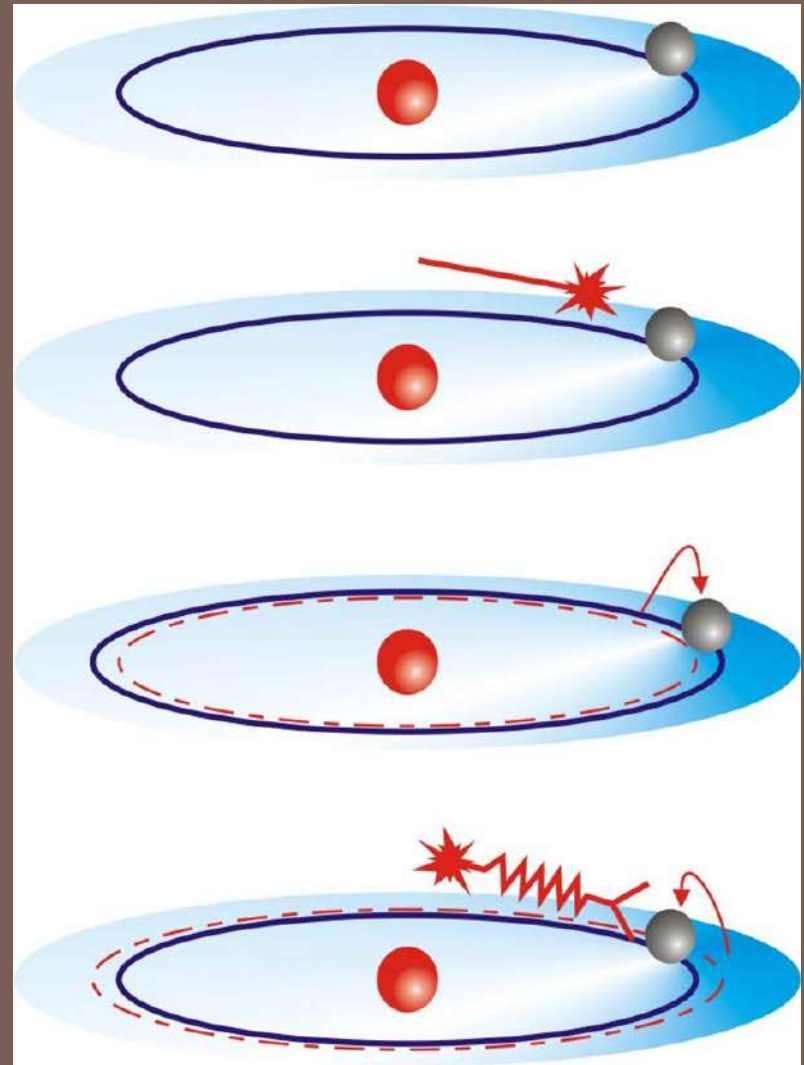
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# FIRST PHASE MOLECULAR EXCITATION

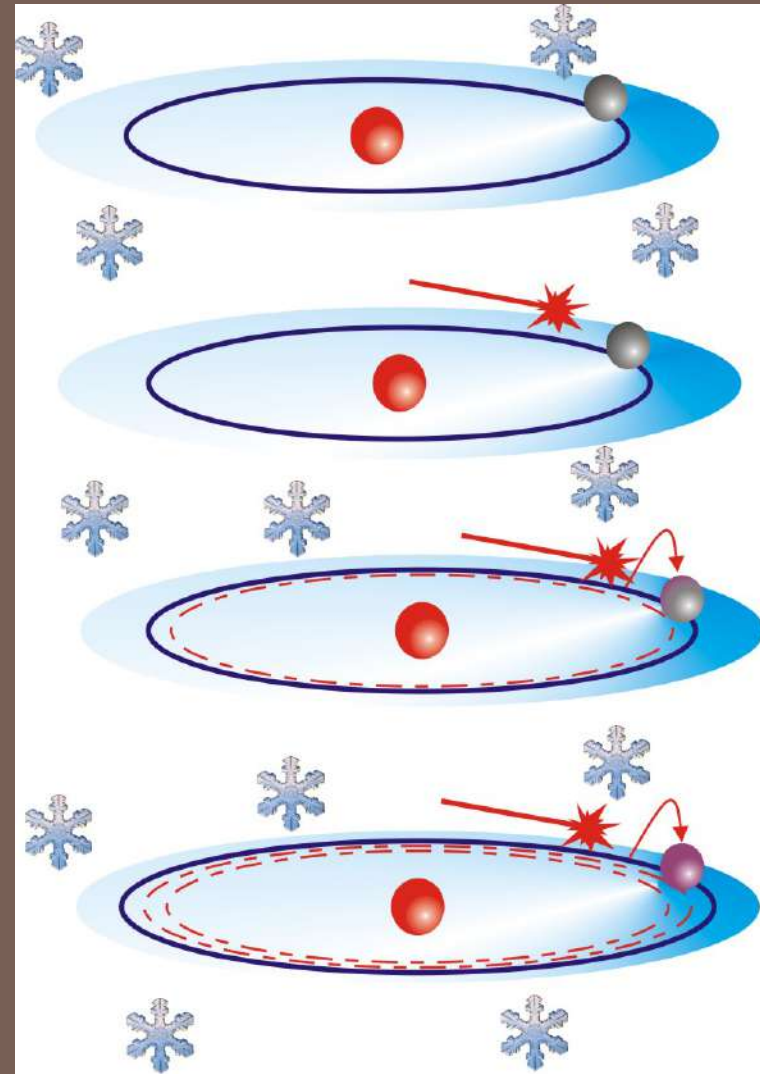
## ROOM TEMPERATURE

IF A PHOTON HITS THE ELECTRON OF A MOLECULE, THE ENERGY APPLIED TO THE ELECTRON CAUSES IT TO PASS TO A HIGHER ENERGY LEVEL. "Quantum leap"  
THIS ENERGY LEVEL IS NOT STABLE, SO THE ELECTRON RETURNS TO ITS ORIGINAL LEVEL BY RE-EMITING A PHOTON



# FIRST PHASE MOLECULAR EXCITATION

TEMPERATURE - 18C °  
IF WE APPLY "photonic" ENERGY TO THE  
LOW TEMPERATURE MOLECULE AGAIN, WE  
OBSERVE THAT THE ELECTRON DECAY  
PROCESS AT THE INITIAL LEVEL IS SLOWER  
THAN THE ELECTRON EXCITATION PROCESS  
AT A HIGHER ENERGY LEVEL  
THEREFORE THEREFORE AN  
ACCUMULATION OF POTENTIAL ENERGY AT  
THE MOLECULE LEVEL

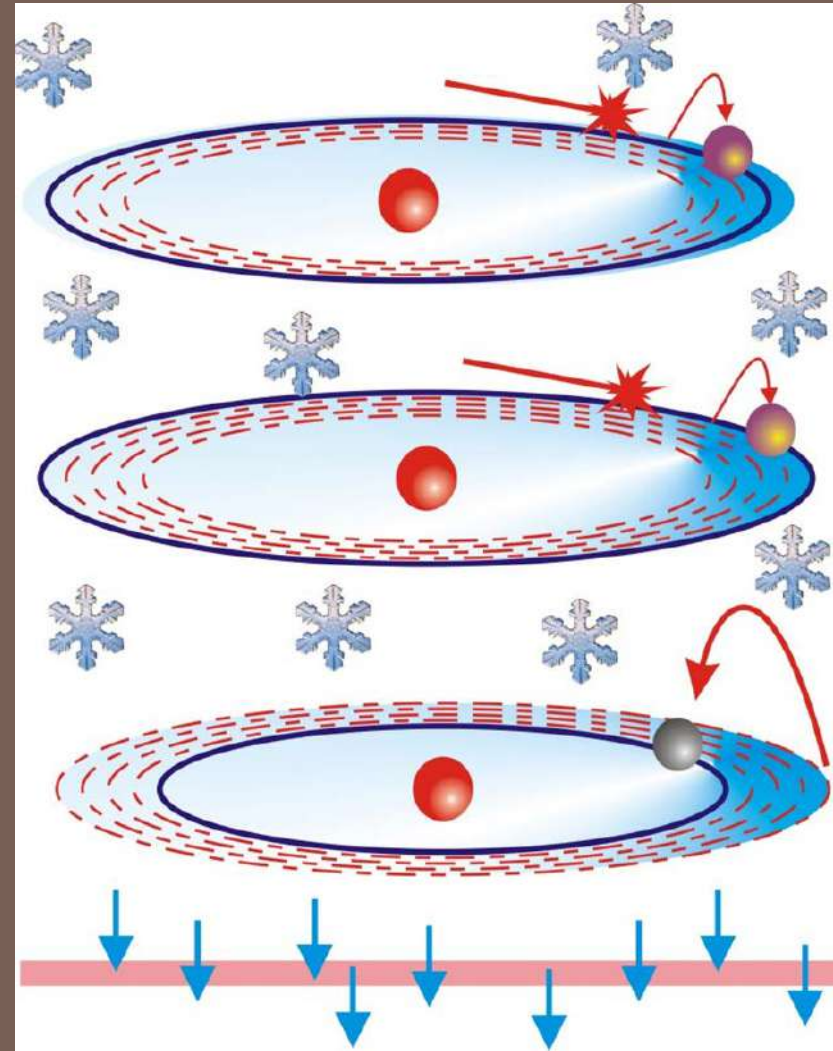


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# FIRST PHASE MOLECULAR EXCITATION

CRYOAPPLICATOR - CUTE INTERFACE  
THE ENERGY FORWARDED BY THE  
MOLECULE IS HELD IN THE ORBITALS AT A  
HIGHER ENERGY LEVEL BY LOW  
TEMPERATURES IN THE FORM OF  
POTENTIAL ENERGY. IN CONTACT WITH THE  
SKIN, THE PRODUCT INCREASES THE  
TEMPERATURE AND MELTS, INSTANTLY  
RELEASING THE ENERGY ACCUMULATED AS  
KINETIC ENERGY, ALLOWING THE  
PENETRATION OF THE DRUG UP TO THE  
DERMA



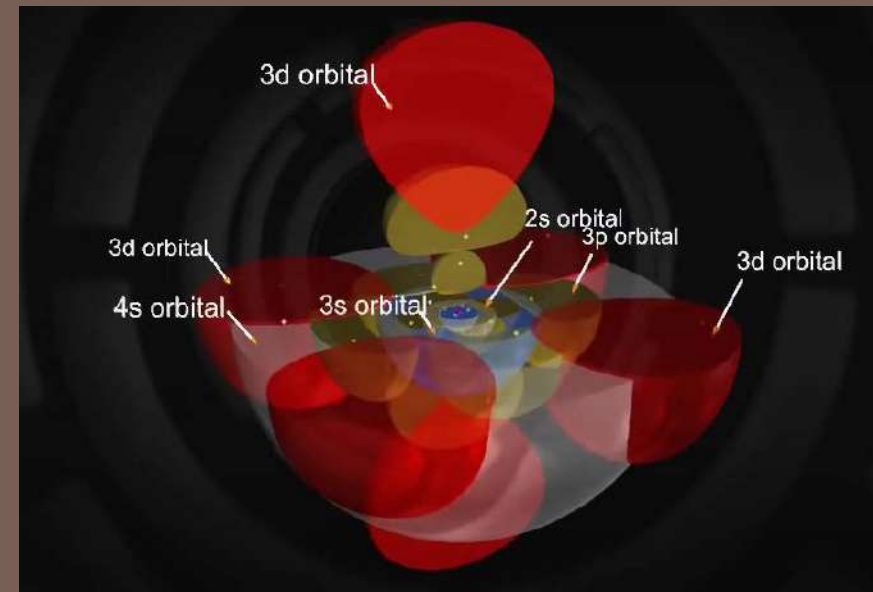
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# FIRST PHASE MOLECULAR EXCITATION

BUT LET'S SEE WHAT ACTUALLY HAPPENS,  
THE MOLECULES HAVE AN ELECTRONIC  
CLOUD IN WHICH THE ELECTRONS ORBIT,  
THE PHOTONIC STIMULATION AT "low  
temperature" CAUSES A DEFORMATION  
OF THE ORBITAL DUE TO THE ABSORPTION  
OF ENERGY ON THE MOLECULE

"The release of this energy will allow the  
passage of the skin barrier"

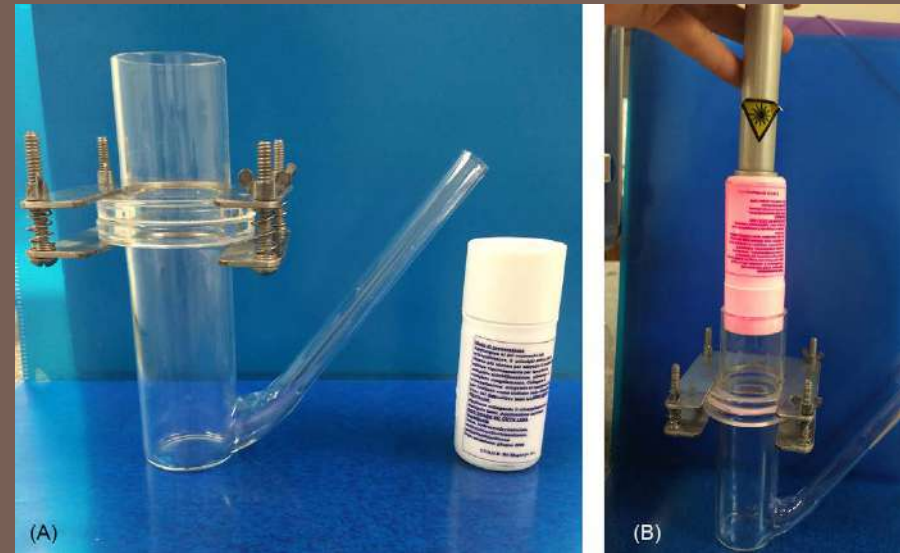
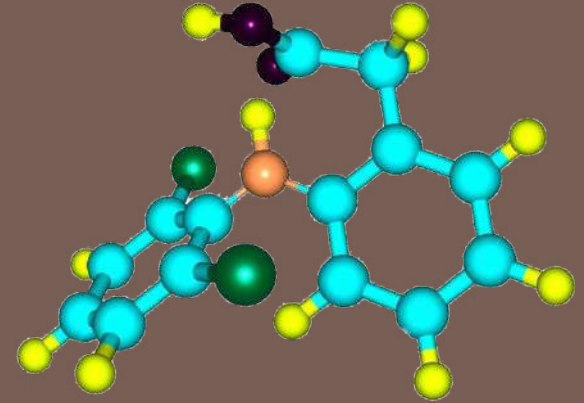


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# FIRST PHASE MOLECULAR EXCITATION

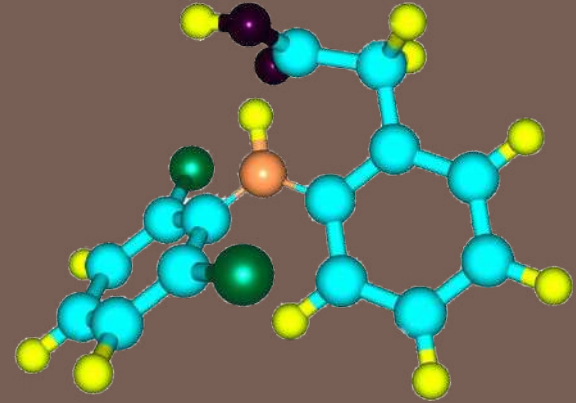
A SIMPLE EXPERIMENT ALLOWS TO TEST THIS CAPACITY OF PENETRATION USING "Franz's cell" WHERE A DISK OF EPIDERMIS SEPARATES THE PRODUCT TO BE TESTED ON ONE SIDE, A RECEIVING SOLUTION ON THE OTHER THE SYSTEM IS THERMOSTATED AT 37C ° TO SIMULATE THE BODY TEMPERATURE. THE EXPERIMENT PROVIDES A TEST WITH A DRUG SOLUTION, COMPARED WITH THE SAME CONCENTRATION INSERTED IN A FROZEN CRYOAPPLICATOR AND COUPLED TO THE LASER SOURCE



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# FIRST PHASE MOLECULAR EXCITATION



## DICLOFENAC SODIUM TEST

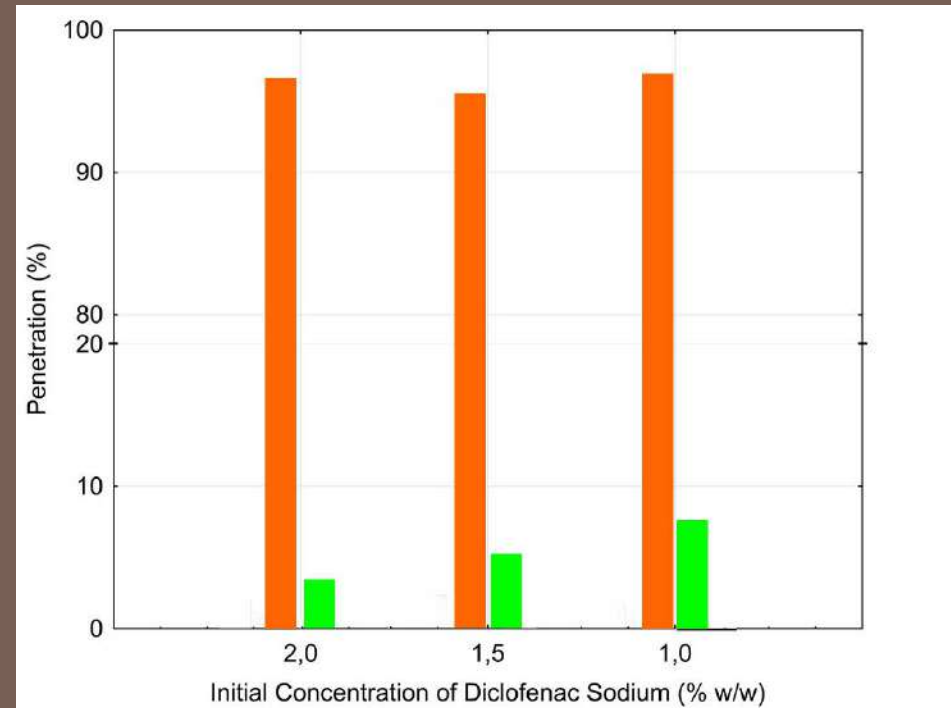
### SOLUTIONS USED:

DICLOFENAC SODIUM 1%

DICLOFENAC SODIUM 1,5%

DICLOFENAC SODIUM 2%

FROM THE "red" GRAPH IT IS NOTED  
THAT THE DRUG APPLIED WITH THE  
CRYOAPPLICATOR GUARANTEES THE  
PASSAGE TO THE UNDERLYING  
SOLUTION OF MORE THAN 90% OF  
THE PRODUCT, WHILE USING A  
SOLUTION WITHOUT LASER  
APPLICATION THE PASSAGE IS  
ALWAYS LESS THAN 10% "green"



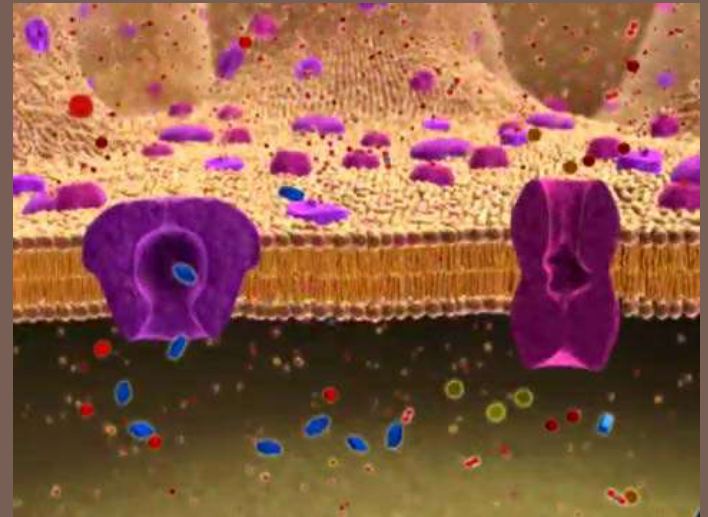
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# SECOND PHASE - MOLECULAR DIFFUSION

*THE "matrix of life" MODEL IS ONE OF THE MOST IMPORTANT DEVELOPMENTS IN MODERN SCIENCE FOR A BETTER UNDERSTANDING OF THE STRUCTURE AND OF THE ENERGY EXCHANGES THAT OCCUR IN THE EXTRACELLULAR MATRIX, A WHOLE "interconnected" CONTINUOUS SYSTEM COMPOSED OF A DYNAMIC CRYSTAL MULTI NETWORK AND DYNAMICS, "liquid crystal structure"*

*FORM A "semiconductor" COMMUNICATION NETWORK CAPABLE OF CARRYING BIOELECTRONIC SIGNALS AND MOLECULES BETWEEN CONNECTIVES AND CYTOSKELETERS OF ALL THE BODY CELLS*



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# SECOND PHASE - MOLECULAR DIFFUSION

PHOTOBIOLOGY EXPLAINS THE EFFECT THAT LIGHT HAS ON A LIVING BIOLOGICAL SYSTEM, IN PARTICULAR THE ABSORPTION OF LOW INTENSITY PHOTONS BY THE "matrix of life"

THERE IS AN "optical window" BETWEEN 600 TO 950 nm WHERE THE TISSUE PENETRATION IS MAXIMUM IN WHICH "photons" CAN ACTIVATE CELLULAR PHOTORECEPTORS OR ACCELERATE ELECTRONIC TRANSFER REACTIONS



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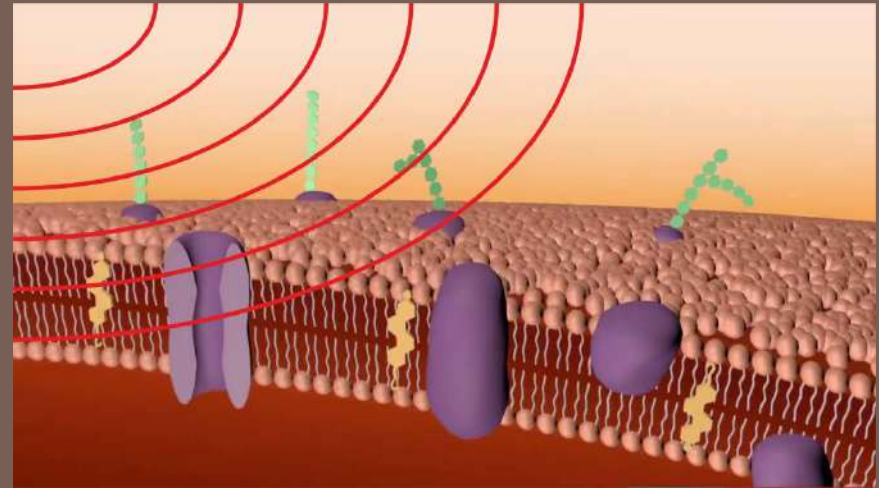
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# SECOND PHASE - MOLECULAR DIFFUSION

IN PARTICULAR, THE INTERACTION BETWEEN "photons" AND PHOTORECEPTOR TAKES PLACE ON ENZYMATIC PROTEIN COMPONENTS, THE "C-cytochrome-oxidase" WHOSE EXCITATION FREQUENCY IS 635nm, ACTIVATION INCREASES ENERGY PRODUCTION IN THE FORM OF ATP

*THE DRUG MOLECULES NOW DIFFUSED IN THE "matrix of life" ARE FREE TO MOVE THROUGH THE LIQUID CRYSTAL STRUCTURES, TO REACH THE ENERGY EXCHANGE POINTS PRESENT ON THE CELL MEMBRANE AND BE USED.*

*- EXACTLY THE SAME MECHANISM THAT OCCURS WITH A SYSTEMIC ADMINISTRATION, BUT WITH A MORE TARGETED ACTION.*

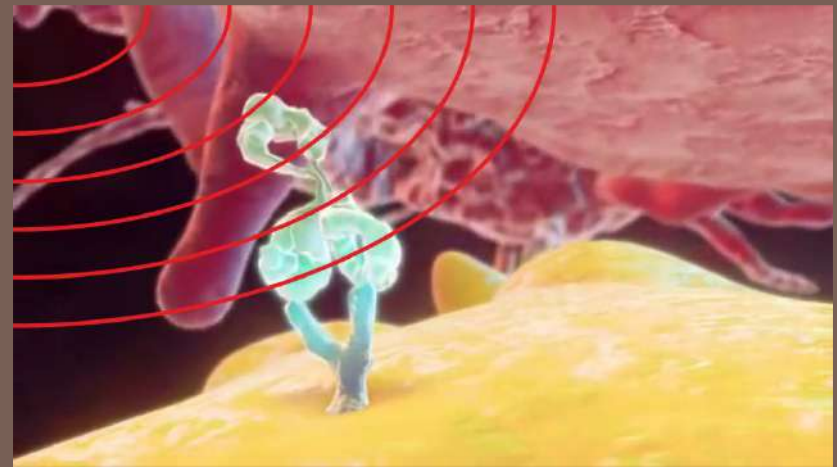
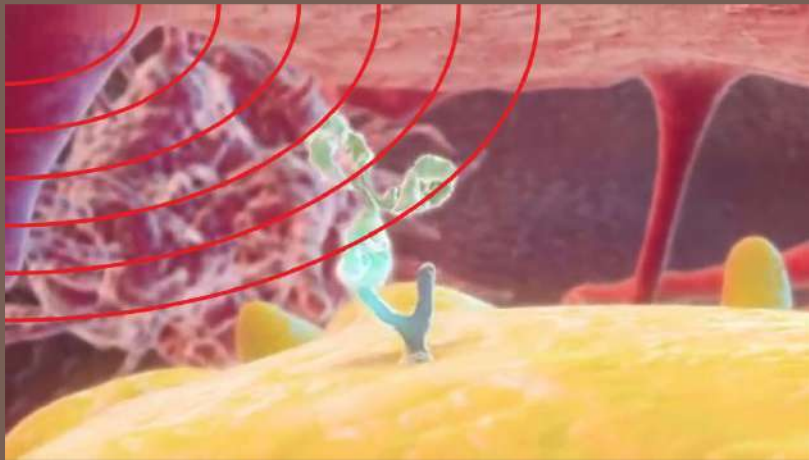


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# SECOND PHASE - MOLECULAR DIFFUSION

LASER STIMULATION FURTHER PROMOTES THE CAPACITY OF DRUG MOLECULES, BY CELLULAR RECEPTORS, INCREASING THE CAPACITY OF THE THERAPEUTIC EFFECTIVENESS, ESPECIALLY IN A SYSTEMICALLY WAY.



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# SECOND PHASE - MOLECULAR DIFFUSION

## INSTRUMENTAL INVESTIGATION

WITH A SIMPLE EXPERIMENT IT IS POSSIBLE TO HIGHLIGHT THE ANSWER IN THE "matrix of life" OF INCREASE IN ATP PRODUCTION

PATIENT WITH SPORTS TRAUMA BILATERAL MUSCULAR CONTRACTURE IN LUMBUS - SACRAL CORRESPONDENCE TREATED WITH CRYOAPPLICATOR CONTAINING MUSCORIL AND DICLOFENAC.



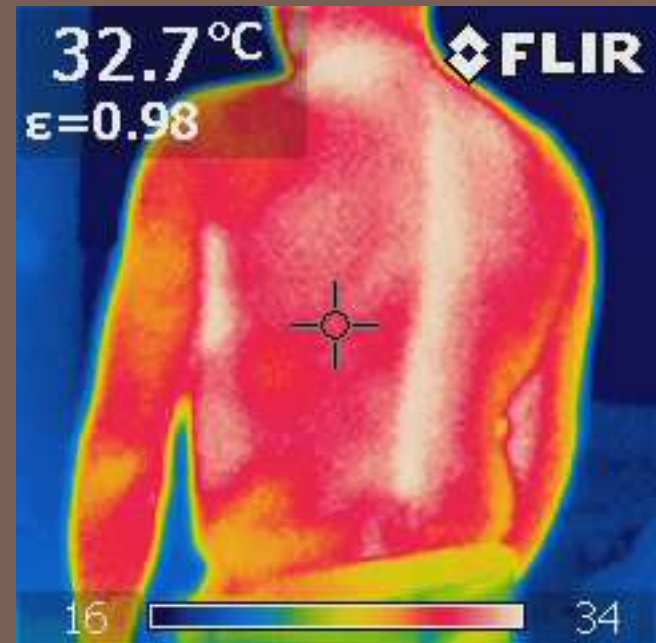
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# SECOND PHASE - MOLECULAR DIFFUSION

YOU ARE USING A THERMAL CAMERA WITH A TEMPERATURE RESOLUTION  $0.1\text{C}^{\circ}$

THERMOGRAPHY BEFORE CRIOPASS THERAPY TREATMENT NO PARTICULAR TEMPERATURE CHANGES ARE OBSERVED IN THE AREAS AFFECTED BY TRAUMA ONLY BY USOGRAPHY IT IS POSSIBLE TO HIGHLIGHT THE ALTERATIONS OF THE STRUCTURES



LA TERMOGRAFIA PRIMA DEL TRATTAMENTO

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# SECOND PHASE - MOLECULAR DIFFUSION

AFTER THE TREATMENT, WE CAN OBSERVE POINTS OF HYPERTHERMIA LOCALIZED EXACTLY IN CORRESPONDENCE OF THE MUSCULAR INJURY POINTS, THAT IS TO EMPHASIZE HOW THE THERAPY IS TARGETED BECAUSE IN CORRESPONDENCE OF THE CELLS INTERESTED WITH THE PROCESSES ATP RELEASE, WHICH CAN BE REVEALED BY THE INCREMENTATION OF TEMPERATURE

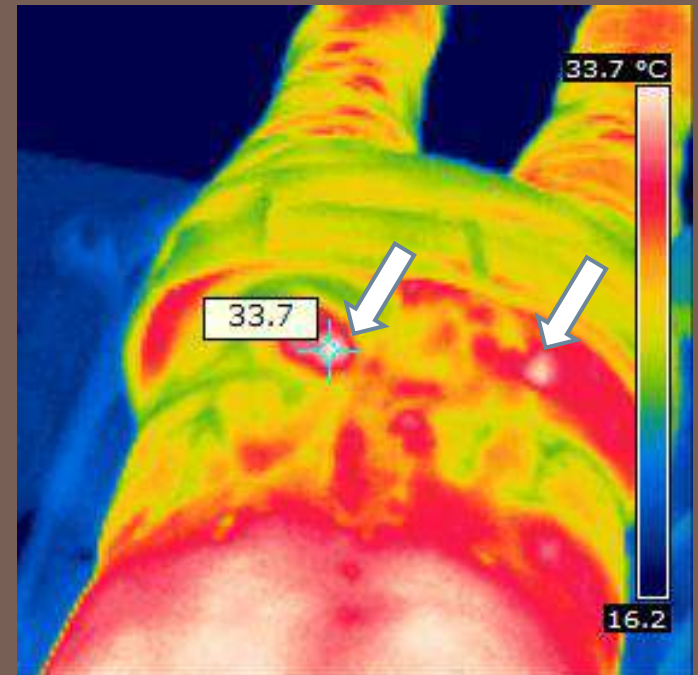


IMMAGINE TERMOGRAFICA A FINE TERAPIA

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- Wrinkle regeneration
- Hair regeneration
  
- Reprogramming of ulcerated tissues
- Keloid reprogramming
- Reprogramming scars
  
- Breast ptosis
- Pefs and localized adiposity

# DEEP REGENERATION WRINKLES

PATIENT 50 YEARS  
DEEP FACE WRINKLES  
TREATED WITH MOLECULAR LASER  
1 THERAPY PER WEEK FOR 4 WEEKS

THERAPEUTIC PROTOCOL  
Sodium Hyaluronate  
differentiation factors and growth factors  
extracted from Zebrafish embryos



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# DEEP REGENERATION WRINKLES

PATIENT 50 YEARS  
FACE WRINKLES  
TREATED WITH MOLECULAR LASER  
1 THERAPY PER WEEK FOR 4 WEEKS

epigenetic regulation in skin regeneration with  
growth and differentiation factors of stem cells  
from the Zebrafish embryos



Picture at T0



Picture at T4

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## DEEP REGENERATION WRINKLES

PATIENT 70 YEARS

DEEP WRINKLES PERIORAL AREA, CHIN AND  
CHEEKS TREATED WITH MOLECULAR LASER

epigenetic regulation in skin regeneration with  
growth and differentiation factors of stem cells  
from the zebrafish embryos



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# DEEP REGENERATION WRINKLES

PATIENT 70 YEARS

DEEP WRINKLES PERIORAL AREA, CHIN AND  
CHEEKS TREATED WITH MOLECULAR LASER

DURATION 30 DAYS

1 THERAPY EVERY 5 DAYS

epigenetic regulation in skin regeneration with  
growth and differentiation factors of stem cells  
from the zebrafish embryos



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# DEEP REGENERATION WRINKLES

## PROTOCOLLO TERAPEUTICO

cycle therapy: 30 days therapy

Sodium Hyaluronate

differentiation factors extracted from Zebrafish embryos



Picture at T0

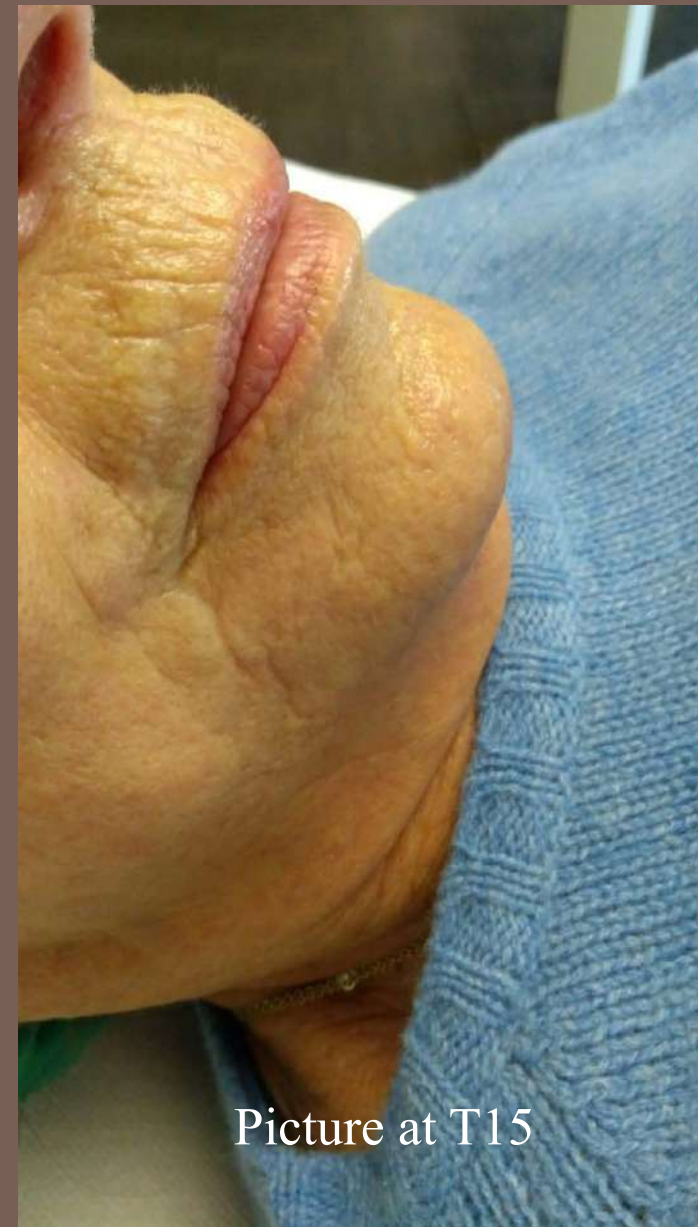
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## DEEP REGENERATION WRINKLES

ALREADY FROM THE THIRD THERAPY, IT CAN BE OBSERVED HOW THE SKIN STRUCTURE BEGINS TO SHOW A NET IMPROVEMENT DUE TO:

epigenetic regulation in tissue regeneration obtained with growth and differentiation factors of stem cells from the Zebrafish embryos



Picture at T15

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## DEEP REGENERATION WRINKLES



Picture at T15

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Picture at T30

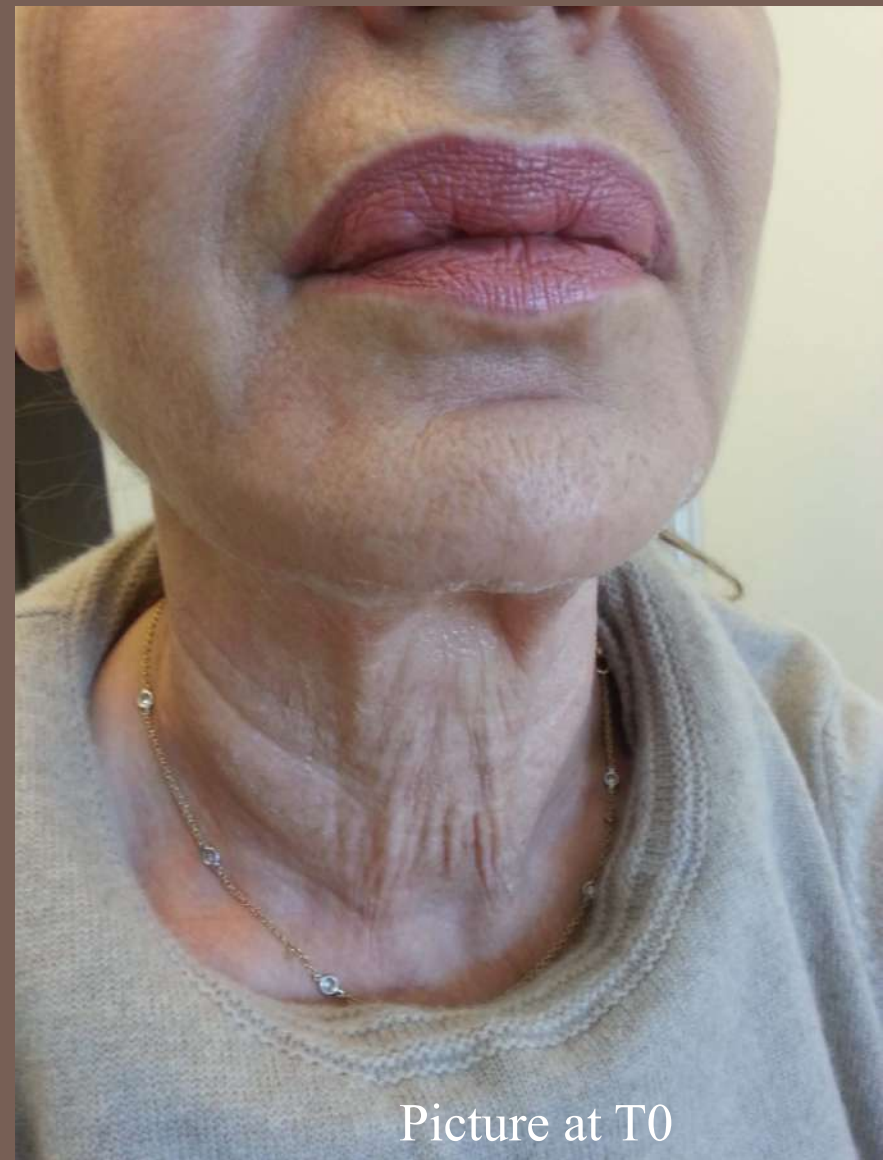
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# DEEP REGENERATION WRINKLES

PATIENT 63 YEARS  
WRINKLES NECK  
TREATED WITH MOLECULAR LASER

epigenetic regulation in skin regeneration with  
growth and differentiation factors of stem cells  
from the zebrafish embryos



Picture at T0

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# DEEP REGENERATION WRINKLES

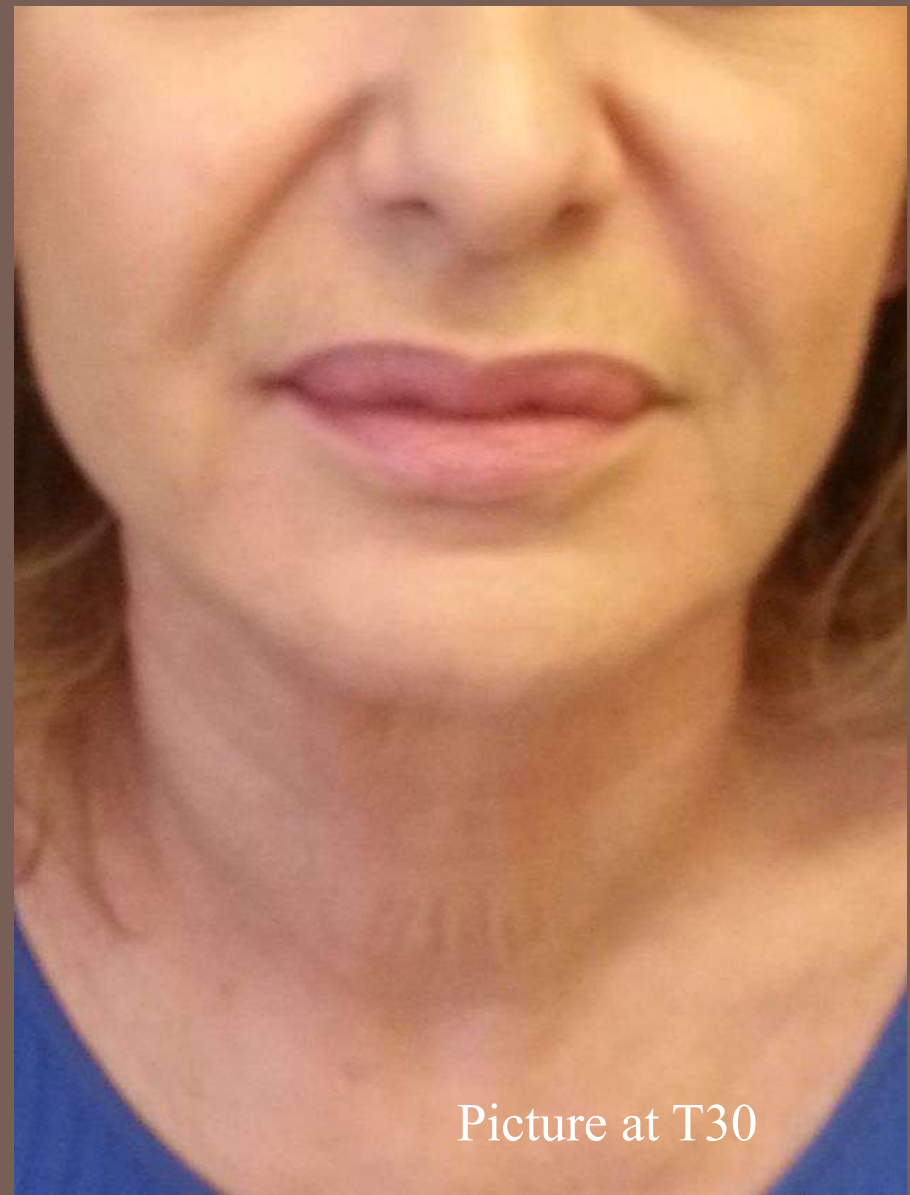
## THERAPEUTIC PROTOCOL

cycle therapy: 30 days

1 therapy every 5 days

Sodium Hyaluronate

differentiation factors and growth factors  
extracted from Zebrafish embryos



Picture at T30

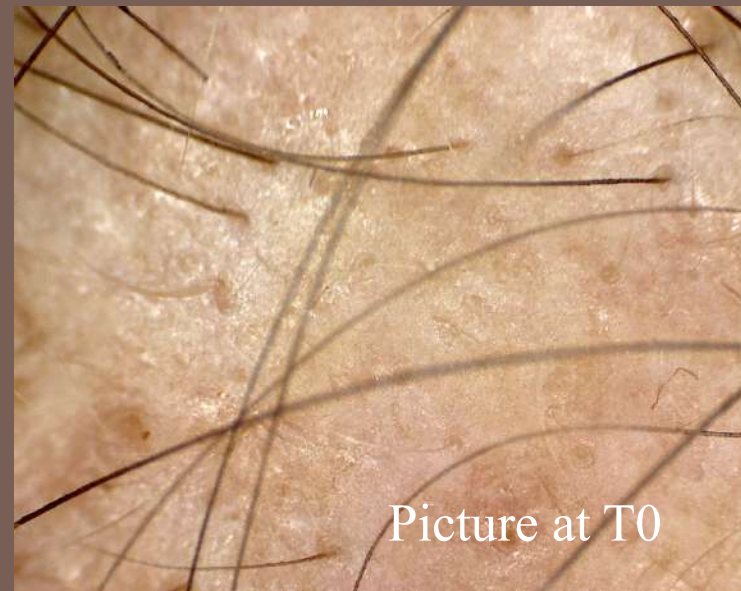
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## REGENERATION CAPILLARY

PATIENT 59 YEARS  
ANDROGENETIC ALOPECIA  
TREATED WITH CRIOPASS THERAPY  
1 THERAPY PER WEEK FOR 10 WEEKS

epigenetic regulation in hair regeneration with stem  
cell growth and differentiation factors from the  
Zebrafish embryos



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## REGENERATION CAPILLARY

**THERAPEUTIC PROTOCOL**  
**1 THERAPY PER WEEK FOR 10 WEEKS**

**Sodium Hyaluronate**  
**Polypeptides from Zebrafish embryos**



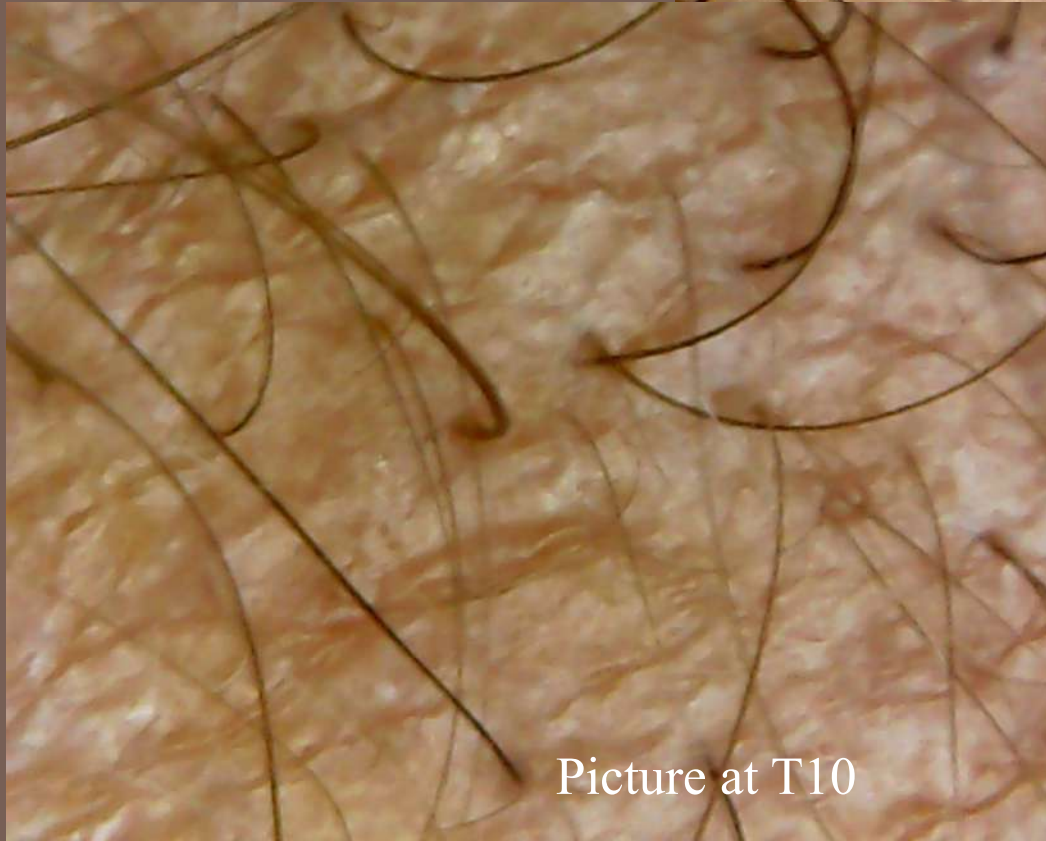
Picture at T5



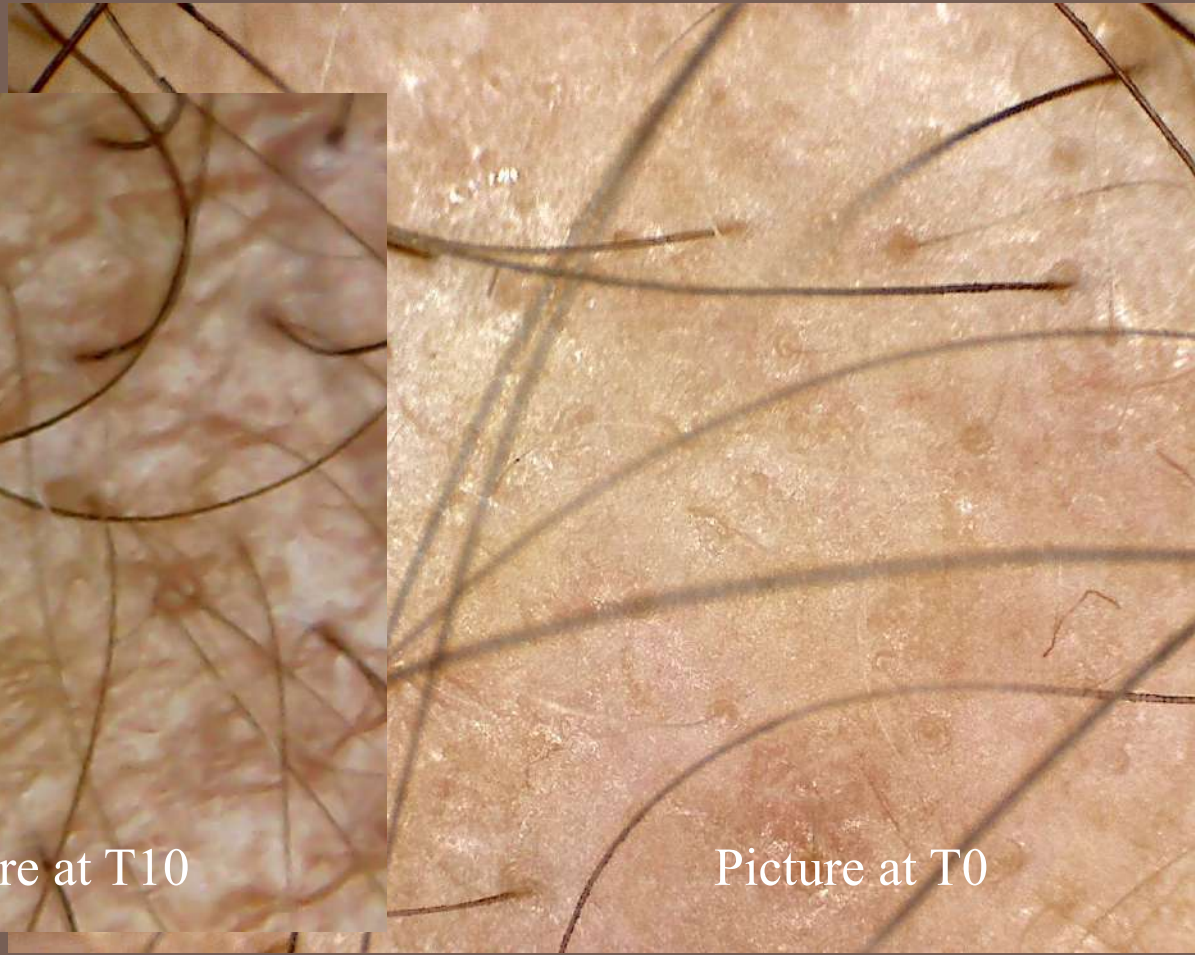
Picture at T10

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Picture at T10



Picture at T0

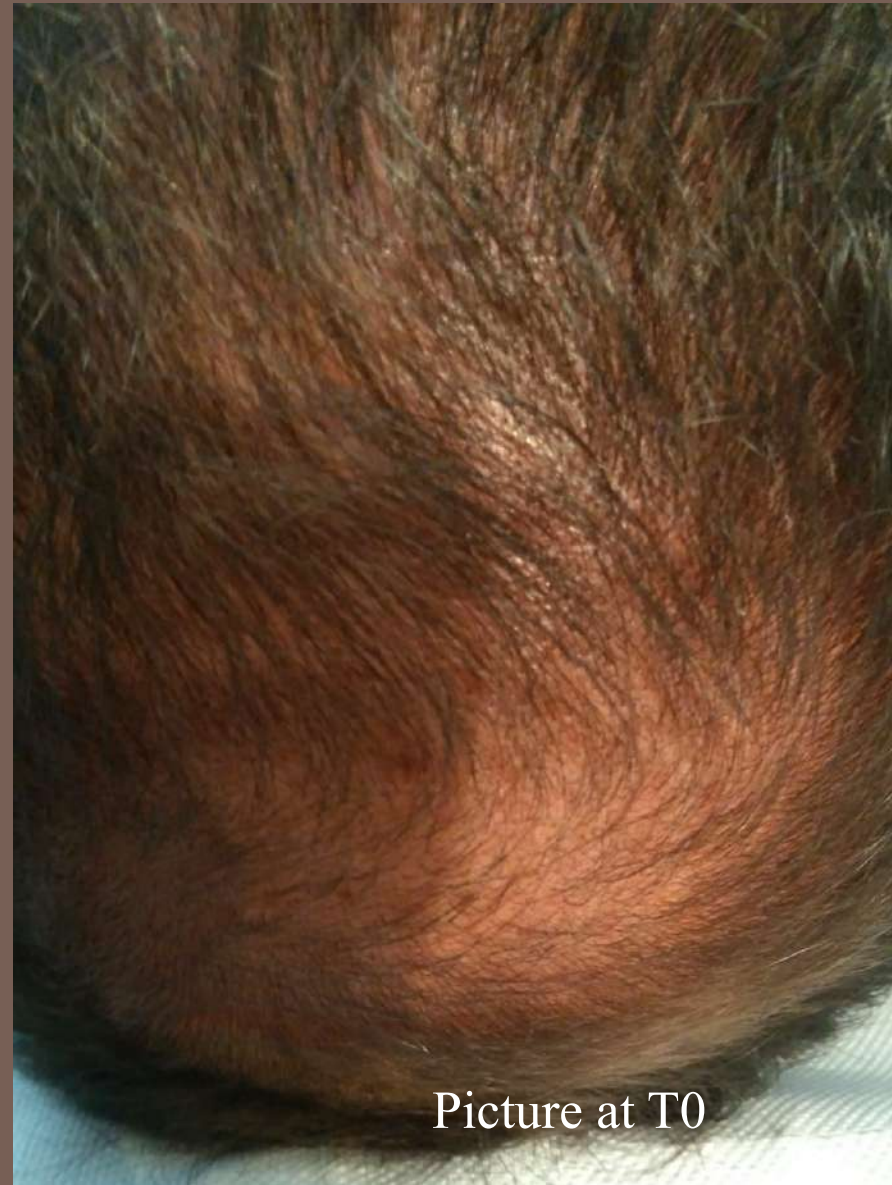
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# REGENERATION CAPILLARY

PATIENT 48 YEARS  
ANDROGENETIC ALOPECIA  
TREATED WITH CRIOPASS THERAPY  
1 THERAPY PER WEEK FOR 10 WEEKS

epigenetic regulation in hair regeneration  
with stem cell growth and differentiation  
factors from the zebrafish embryos



Picture at T0

MD Sophia  
Zafiropoulou

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## REGENERATION CAPILLARY

**THERAPEUTIC PROTOCOL**  
**1 THERAPY PER WEEK FOR 10**  
**WEEKS**

**Sodium Hyaluronate**  
**Polypeptides from Zebrafish**  
**embryos**

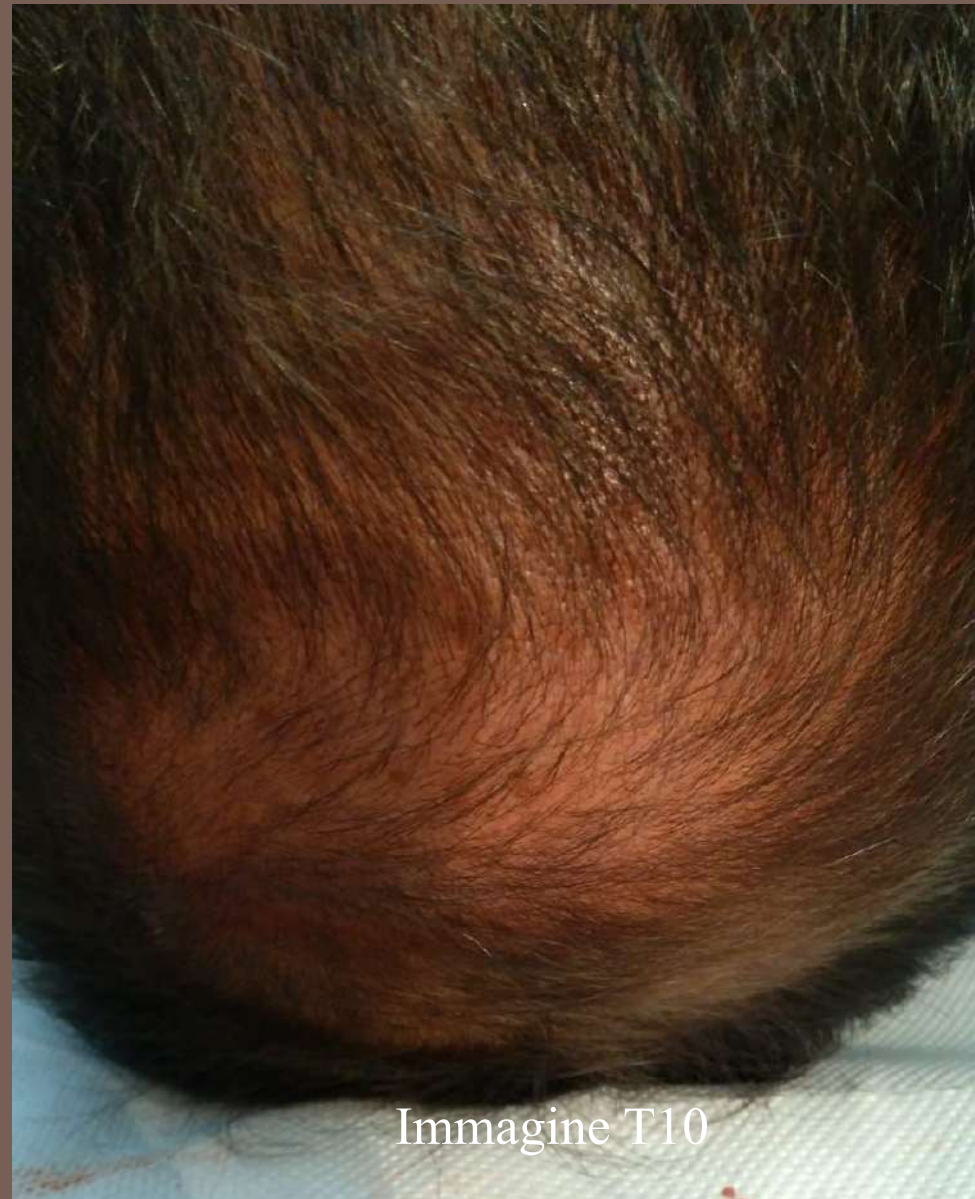


Immagine T10

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## REGENERATION CAPILLARY

PATIENT 60 YEARS OLD FEMALE  
ANDROGENETIC ALOPECIA  
TREATED WITH CRIOPASS THERAPY  
1 THERAPY PER WEEK FOR 10 WEEKS

epigenetic regulation in hair regeneration  
with stem cell growth and differentiation  
factors from the Zebrafish embryos



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## REGENERATION CAPILLARY

**THERAPEUTIC PROTOCOL**  
**1 THERAPY PER WEEK FOR 10 WEEKS**

**Sodium Hyaluronate**  
**Polypeptides from Zebrafish embryos**



Picture at T10

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- Reprogramming of ulcerated tissues
- Keloid reprogramming
- Reprogramming scars
  
- Breast ptosis
- Pefs and localized adiposity

# DIABETIC ULCERS

PATIENT 60 YEARS  
DIABETIC ULCER ALLUCE RIGHT  
TREATED WITH MOLECULAR LASER  
DURATION 90 DAYS  
1 THERAPY EVERY 4 DAYS

epigenetic regulation in skin regeneration and microcirculation with growth and differentiation factors of stem cells from the Zebrafish embryos



Picture at T0

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# DIABETIC ULCERS

## THERAPEUTIC PROTOCOL

By means of Criopass Therapy

DURATION 3 MONTHS

1 THERAPY EVERY 4 DAYS

## VERAPAMIL HYDROCHLORIDE

differentiation factors extracted  
from Zebrafish embryos



Picture at T6

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# DIABETIC ULCERS



Picture at T12



Picture at T24

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# DECUBITUS ULCERS

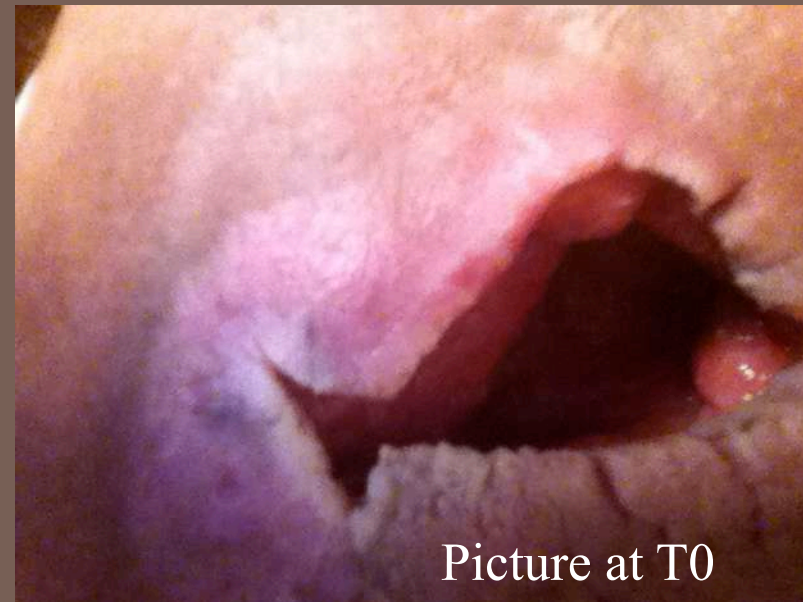
PATIENT 48 YEARS

BED FOR 15 YEARS FOLLOWING SPINAL  
TRAUMA WITH SERIOUS MEDULLARY INJURY  
TREATED WITH MOLECULAR LASER

DURATION 90 DAYS

1 THERAPY EVERY 4 DAYS

epigenetic regulation in skin regeneration and  
microcirculation with growth and differentiation  
factors of stem cells from the Zebrafish embryos



Picture at T0

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# DECUBITUS ULCERS

## THERAPEUTIC PROTOCOL

By means of Criopass Therapy

DURATION 3 months

1 THERAPY EVERY 4 DAYS

Sodium HYALURONATE

GLUCOSAMINE SULFATE

CHONDROITIN SULFATE

differentiation factors extracted  
from Zebrafish embryos



Picture at T24

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# DECUBITUS ULCERS

PATIENT 81 YEARS  
DECUBITUS ULCER TREATED WITH TRADITIONAL  
THERAPIES FOR 12 MONTHS WITHOUT  
SUCCESS

TREATED WITH MOLECULA LASER EVERY 7 DAYS  
FOR 2 MONTHS



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# DECUBITUS ULCERS

**THERAPEUTIC PROTOCOL**

**DURATION 60 DAYS**

**1 THERAPY PER WEEK**

**CEFTRIAXONE**

**POLIDEXOXYRIBONUCLEOTIDE**

**Sodium HYALURONATE**

**differentiation factors extracted  
from Zebrafish embryos**

Picture at T5



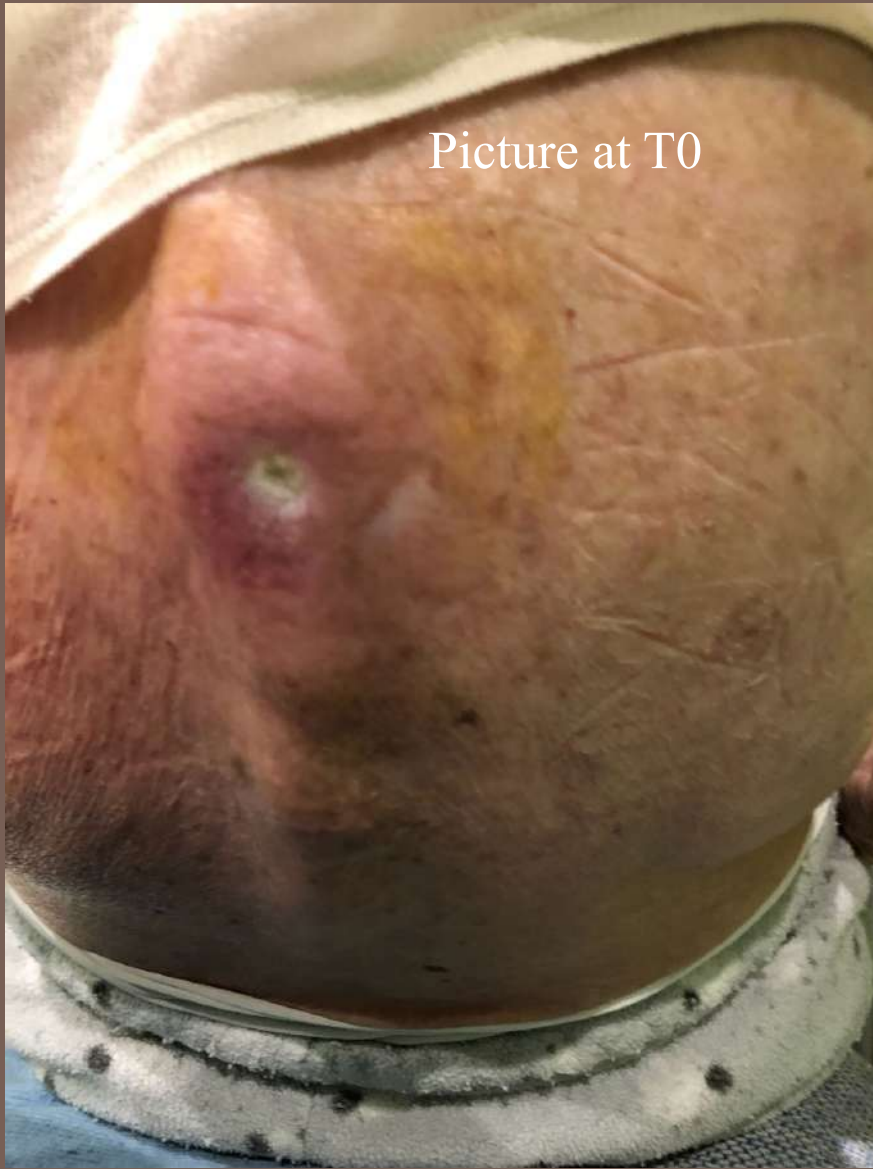
Picture at T7



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Picture at T0



Picture at T8



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# DECUBITUS ULCERS

PATIENT 40 YEARS  
DECUBITUS ULCER TREATED WITH TRADITIONAL  
THERAPIES FOR 12 MONTHS WITHOUT  
SUCCESS

TREATED WITH MOLECULAR LASER EVERY 7  
DAYS FOR 2 MONTHS



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# DECUBITUS ULCERS

**THERAPEUTIC PROTOCOL**  
**THERAPY DURATION 60 DAYS**  
**1 THERAPY PER WEEK**

**POLIDEXOXYRIBONUCLEOTIDE**  
**SODIUM HYALURONATE**  
differentiation factors extracted  
from Zebrafish embryos



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# DEEPI THELISATION OF THE SKIN

PATIENT 77 YEARS  
SKIN DEEPI THELISATION  
IN SCOAGULATED  
CARDIOPATHIC PATIENT  
FOLLOWING ACCIDENTAL  
FALL



Picture at T0

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# DEEPIITHELISATION OF THE SKIN

**THERAPEUTIC PROTOCOL**  
**THERAPY DURATION 60 DAYS**  
**1 THERAPY PER WEEK**

**SODIUM HYALURONATE**  
**CEFITRIAXONE**  
**POLIDEXOXYRIBONUCLEOTIDE**  
differentiation factors extracted  
from Zebrafish embryos



Picture at T3

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**DEEPIHELISATION  
OF THE SKIN**

Picture at T7 SX

Picture at T8 DX

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# DECUBITUS ULCERS

PATIENT 89 YEARS  
HEEL DECUBITUS ULCER  
TREATED WITH TRADITIONAL THERAPIES FOR  
12 MONTHS WITHOUT SUCCESS  
WITH IMPORTANT NECROSIS OF SOFT  
TISSUE AND BONE

TREATED WITH MOLECULAR LASER EVERY 5  
DAYS FOR 4 MONTHS

Picture at T0



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# DECUBITUS ULCERS

**THERAPEUTIC PROTOCOL**  
**DURATION 120 DAYS**  
**1 THERAPY EVERY 5 DAYS**

**VERAPAMIL HYDROCHLORIDE**  
**CEFTRIAXONE**  
**POLIDEXOXYRIBONUCLEOTIDE**  
**SODIUM HYALURONATE**  
**differentiation factors extracted**  
**from Zebrafish embryos**



Picture at T5

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Picture at T8



Picture at T10

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Picture at T16



Picture at T20



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Picture at T0



Picture at T24



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# CHELOIDS

CHELOIDATE LESION TREATMENT  
SEVERE AND EXTENDED

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# CHELOIDS

PATIENT 36 YEARS  
BURN AT 28 YEARS OLD WITH FREE FLAME

SUBJECT TO VARIOUS RECONSTRUCTIVE  
INTERVENTIONS WITH SKIN GRANTS

HAS DEVELOPED SEVERE CHELOIDAL INJURY  
AND EXTENDED ON THE FACE AND NECK

IN THE FOLLOWING 8 YEARS IT WAS SUBJECTED  
TO THE MOST VARIOUS TECHNIQUES TO REDUCE  
KELOIDS, WITHOUT APPRECIATIVE RESULTS



Picture at T0

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# CHELOIDS

IT HAS BEEN DECIDED TO TREAT THE PATIENT USING MOLECULAR LASER, WITH DIFFERENT DRUG ABLE TO CONCENTRATE IMPORTANT QUANTITIES OF PHARMACOLOGICALLY ACTIVE SUBSTANCES AT DESIRED DEPTH.



Prima fase – inserimento farmaco



Seconda fase – scansione Laser

# CHELOIDS

## THERAPEUTIC PROTOCOL

First cycle of therapy: 1 MONTH

1st week

Methylprednisolone Hemisuccinate

Glucosamine Sulphate

2nd week

Methylprednisolone Hemisuccinate

Sodium Hyaluronate

3rd week

Methylprednisolone Hemisuccinate

Glucosamine Sulphate

4th week

Methylprednisolone Hemisuccinate

Sodium Hyaluronate



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# CHELOIDS

## THERAPEUTIC PROTOCOL

Second cycle of therapy: 5 MONTHS

1 APPLICATION every 15 days  
(total 10 applications)

Odd session (1-3-5-7-9)

Methylprednisolone Hemisuccinate

Glucosamine Sulphate

Even sitting (2-4-6-8-10)

Methylprednisolone Hemisuccinate

Sodium Hyaluronate



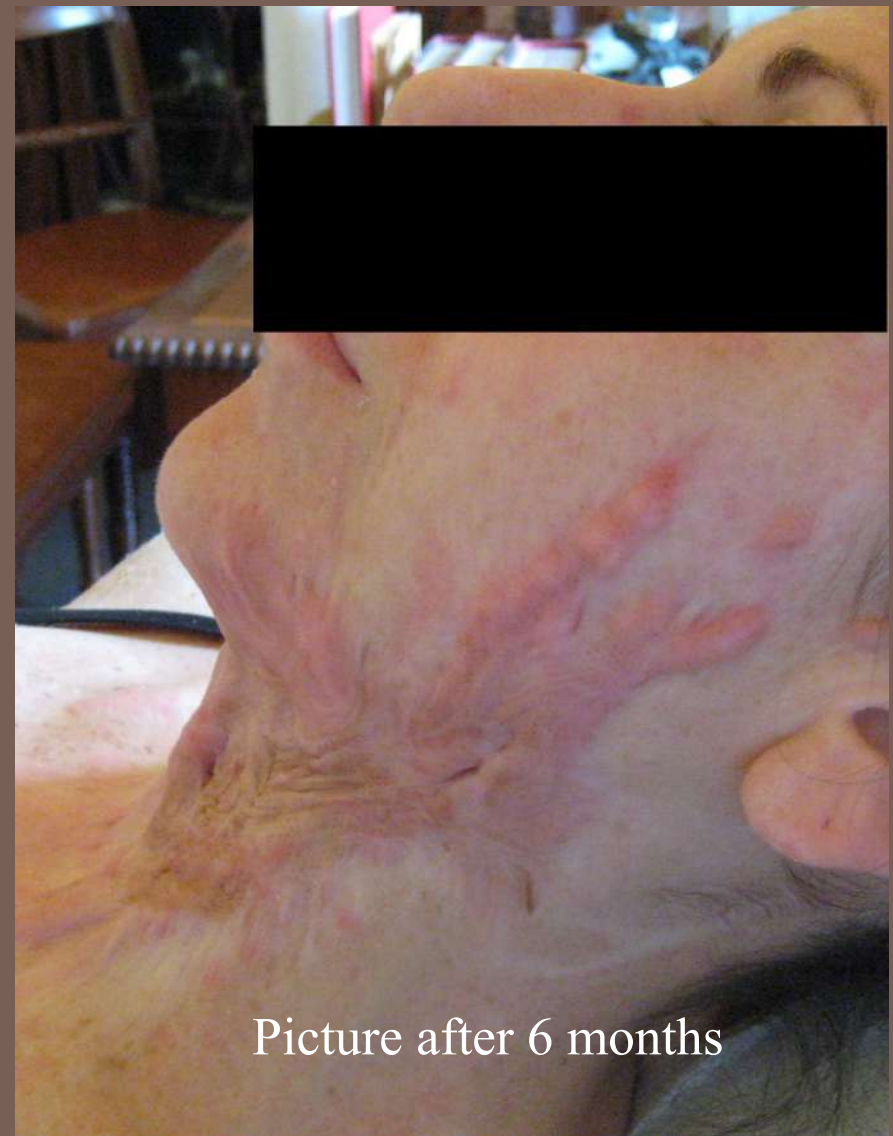
Picture at T6 months

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Picture at T0



Picture after 6 months

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# CHELOIDS

## THERAPEUTIC PROTOCOL

Third cycle of therapy: 6 MONTHS  
(total 6 applications)

1 month therapy

Methylprednisolone

Hemisuccinate

Sodium Hyaluronate

differentiation factors extracted  
from Zebrafish embryos



Picture at T8 months

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# CHELOIDS

## THERAPEUTIC PROTOCOL

**Total therapy: 12 MONTHS  
(total 20 applications)**

**First cycle - 1 month**

**1st week Urbason + Dona**

**Sodium Methylprednisolone Hemisuccinate 40mg**

**Glucosamine Sulphate 800 mg**

**2nd week Urbason + Jalurónico**

**Sodium Methylprednisolone Hemisuccinate 40mg**

**Sodium Hyaluronate 100 mg**

**III week Urbason + Dona**

**Sodium Methylprednisolone Hemisuccinate 40mg**

**Glucosamine Sulphate 800 mg**

**4th week Urbason + Jalurónico**

**Sodium Methylprednisolone Hemisuccinate 40mg**

**Sodium Hyaluronate 100 mg**

**Second Cycle - 5 months**

**Odd seat Urbason + Dona**

**Sodium Methylprednisolone Hemisuccinate 40mg**

**Glucosamine Sulphate 800 mg**

**Sitting equal to Urbason + Hyaluronic acid**

**Sodium Methylprednisolone Hemisuccinate 40mg**

**Sodium Hyaluronate 100 mg**

**Third cycle -6 months**

**1st cryo-applicator Urbason + Hyaluronic acid**

**Sodium Methylprednisolone Hemisuccinate 40mg**

**Sodium Hyaluronate 100 mg**

**II ° Zebrafish cryapplicator**

**differentiation factors extracted from Zebrafish embryos**



Picture T12 months

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# CHELOIDS



Picture after T12  
months



Picture at T0

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# CHELOIDS

PATIENT 40 YEARS  
SCAR AND CHELOID CONSEQUENT TO  
FACIAL LIFTING INTERVENTION



Picture at T0

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# CHELOIDS

## THERAPEUTIC PROTOCOL

Therapy cycle: 1 MONTH

1st week

Methylprednisolone Hemisuccinate

Glucosamine Sulphate

2nd week

Methylprednisolone Hemisuccinate

Sodium Hyaluronate

3rd week

differentiation factors extracted from Zebrafish embryos

4th week

differentiation factors extracted from Zebrafish embryos



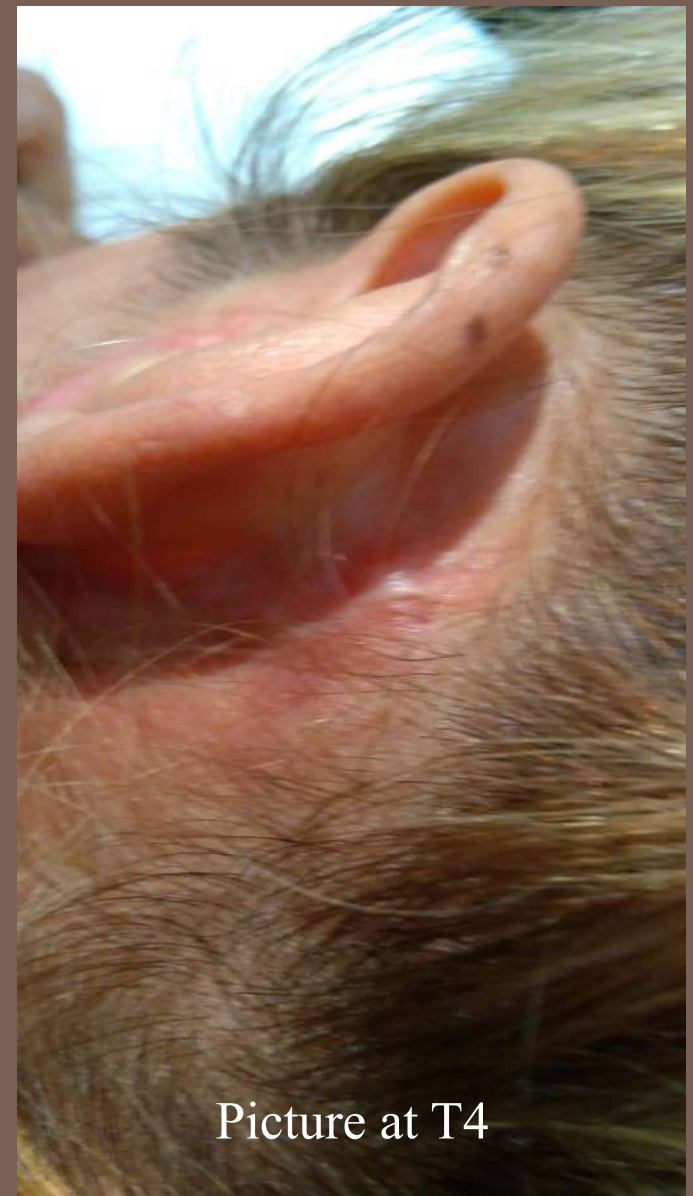
Immagine T2

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# CHELOIDS

**After a month of therapy**



Picture at T4

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# DEEP SCARS

PATIENT 60 YEARS  
DEEP CUT FROM GLASS SHEET  
REBUILDING INTERVENTION TENDONS TOE, INDEX  
AND MIDDLE FINGER

Picture few hours before the  
surgery



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# DEEP SCARS

PATIENT TREATED WITH CRIOPASS THERAPY AFTER  
20 DAYS OF SURGERY

In addition to intervening in the aesthetic improvement of the scar, in this case the regenerative factors extracted from Zebrafish embryos were used to accelerate the regeneration processes of the injured tendons.



Immagine post intervento

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# DEEP SCARS

## THERAPEUTIC PROTOCOL

First cycle of therapy: 2 WEEKS

1 therapy every 3 days

Methylprednisolone Hemisuccinate

Sodium Hyaluronate

differentiation factors extracted from Zebrafish embryos



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# DEEP SCARS

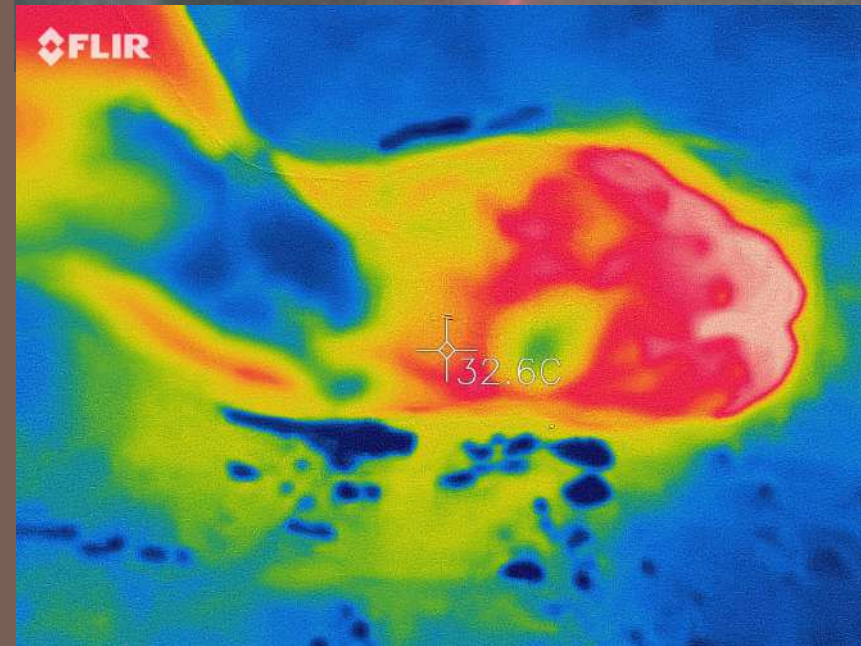
Second cycle of therapy: 8 WEEKS

1 therapy every 7 days

differentiation factors extracted

from the Zebrafish embryos

THERMOGRAPHIC IMAGE DURING  
THERAPY HIGHLIGHTS THE DISTRIBUTION  
OF ACTIVE INGREDIENTS IN THE TISSUES



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# DEEP SCARS

AFTER 2 WEEKS NET IMPROVEMENT OF SCAR



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# DEEP SCARS

AFTER 10 WEEKS, TOTAL RECOVERY OF THE  
MOTOR FUNCTIONALITY OF THE HALLUCE, INDEX  
AND AVERAGE



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# DEEP SCARS

PATIENT 87 YEARS  
SCAR FROM ACCIDENTAL CUT FROM FALL SUTURE  
WITH STRIP PATCHES  
TREATED WITH CRIOPASS THERAPY AFTER 20 DAYS  
OF TRAUMA



Immagine T0

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# DEEP SCARS

## THERAPEUTIC PROTOCOL

cycle therapy: 2 WEEKS

1 therapy every 3 days

Methylprednisolone Hemisuccinate

Sodium Hyaluronate

differentiation factors extracted from Zebrafish embryos



Immagine T2 settimane

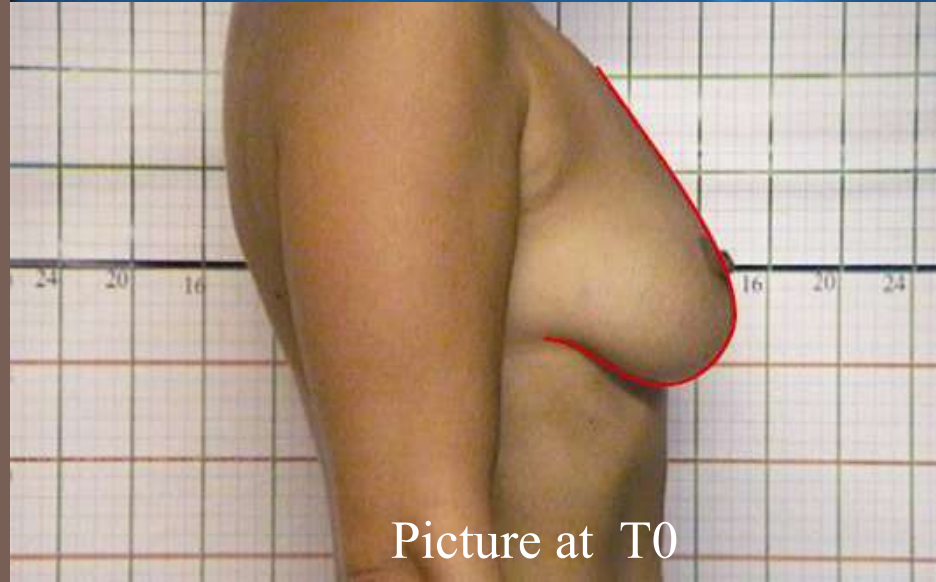
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# BREAST PTOSIS

PATIENT 46 YEARS

Breast ptosis, firming with essential oils  
and cell reprogramming with  
polypeptides from Zebrafish embryos



Picture at T0

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# BREAST PTOSIS

## THERAPEUTIC PROTOCOL

cycle therapy: 5 WEEKS

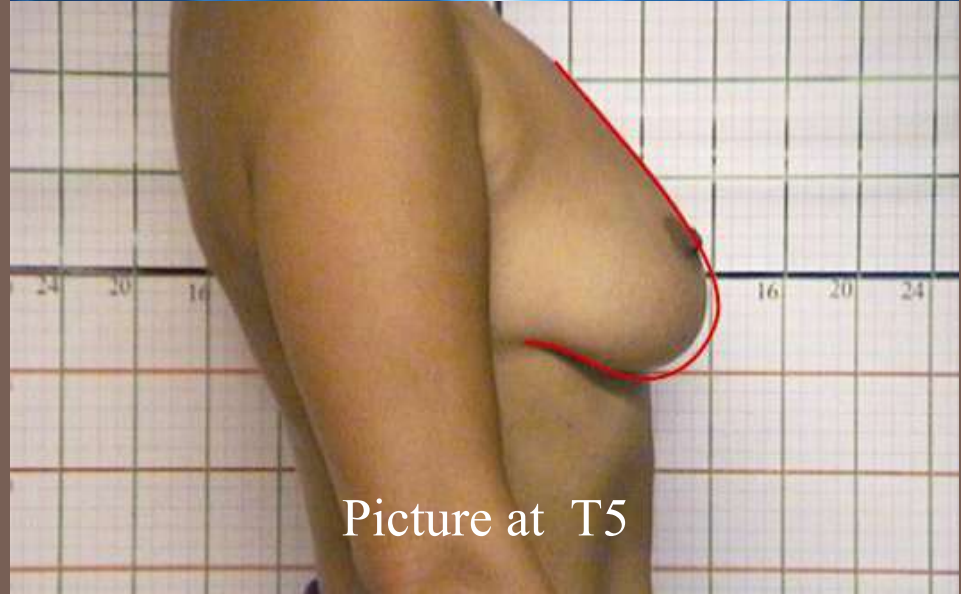
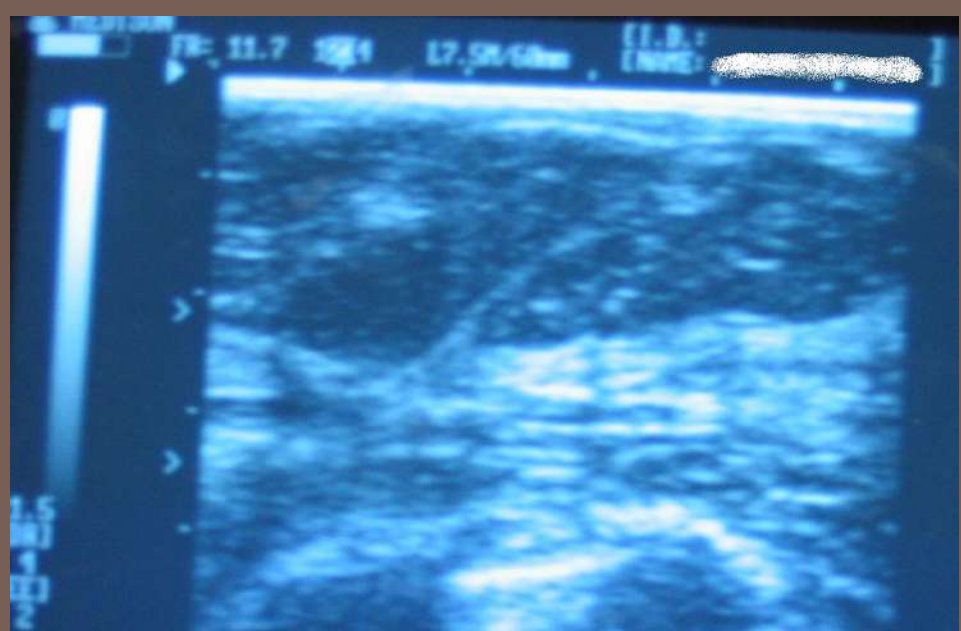
1 therapy per week

Piper nigrum

Origanum majorana

Citrus Paradisi

differentiation factors extracted  
from Zebrafish embryos



Picture at T5

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# PEFS NECK

PATIENT 46 YEARS

Edematous Fibrous Sclerotic  
Panniculopathy neck, treated with  
phosphatidylcholine and cell  
reprogramming with polypeptides from  
Zebrafish embryos



Picture at T0

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# PEFS NECK

## THERAPEUTIC PROTOCOL

cycle therapy: 5 WEEKS

1 therapy per week

PHOSPHATIDYLCHOLINE

URSODEOXYCHOLIC ACID

differentiation factors extracted  
from Zebrafish embryos



Immagine T5

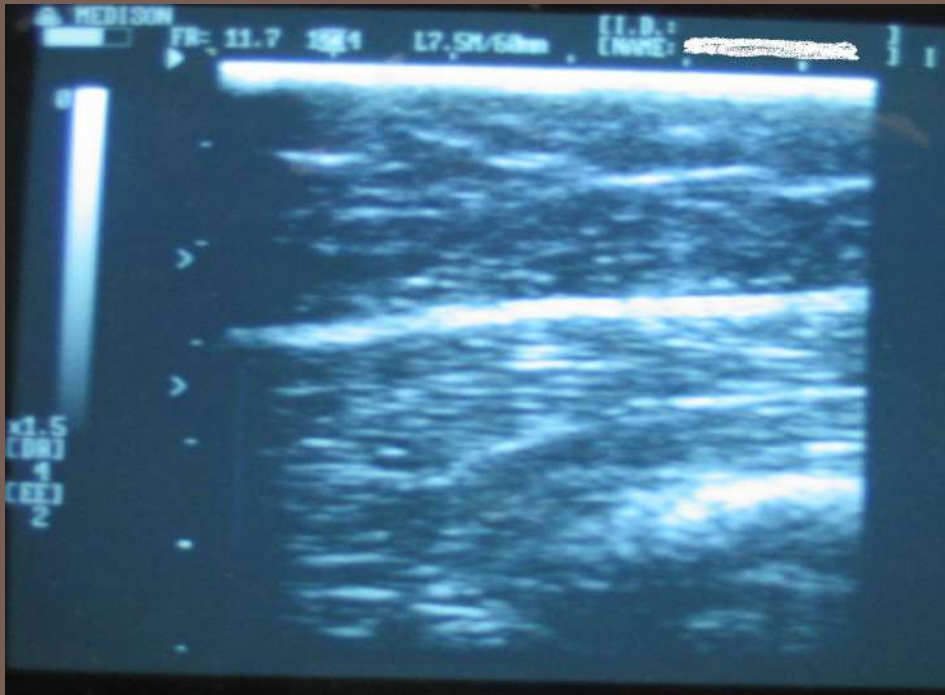
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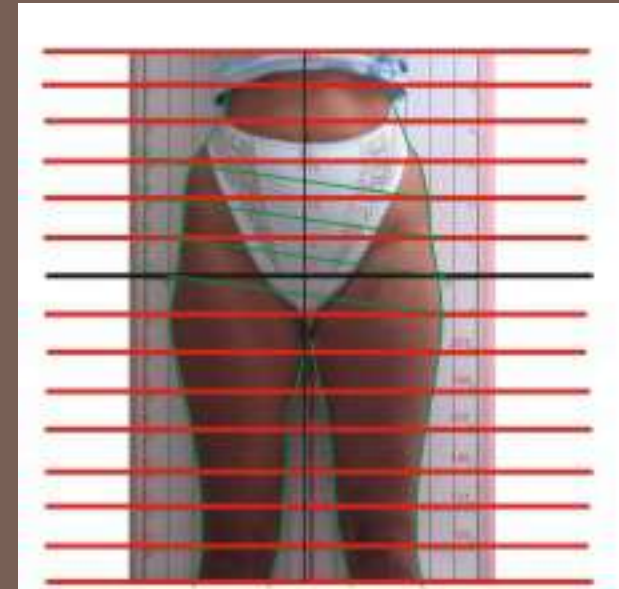
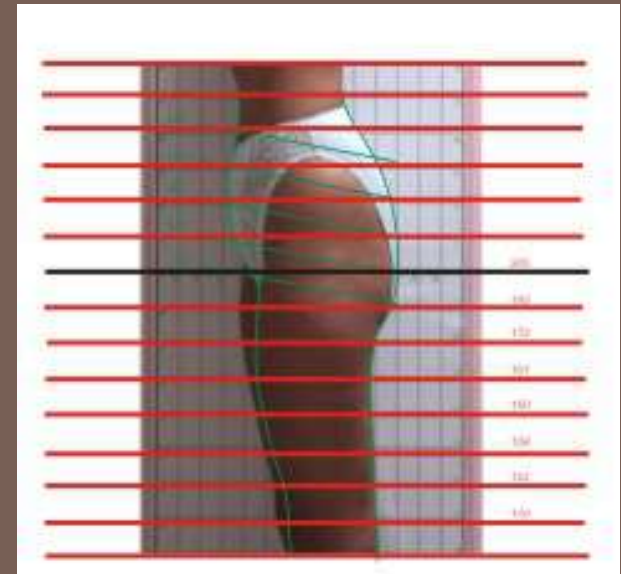
# PEFS LEGS

PATIENT 48 YEARS

Edematous Fibrous Sclerotic Panniculopathy of the legs,  
treated with phosphatidylcholine and cell differentiation  
factors taken from Zebrafish embryos



Immagini T0



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# PEFS LEGS

**THERAPEUTIC PROTOCOL** cycle therapy: 5 WEEKS 1  
therapy per week  
**PHOSPHATIDYLCHOLINE, URSODESOXYCOLIC  
ACID**, differentiation factors extracted from  
Zebrafish embryos

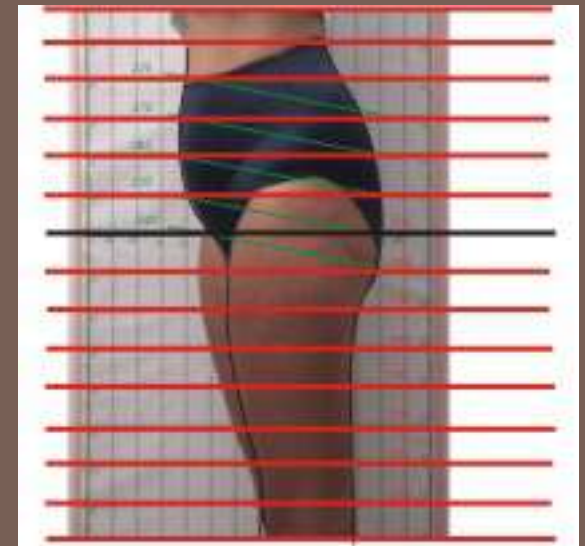
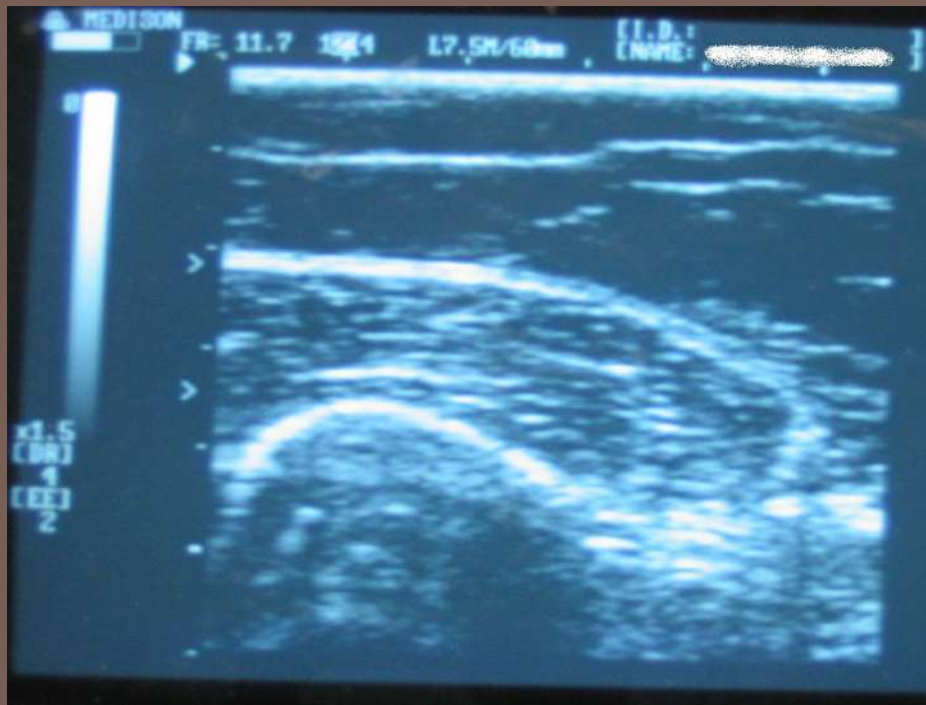


Immagine T5



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