

Say good bye  
to stretch  
marks



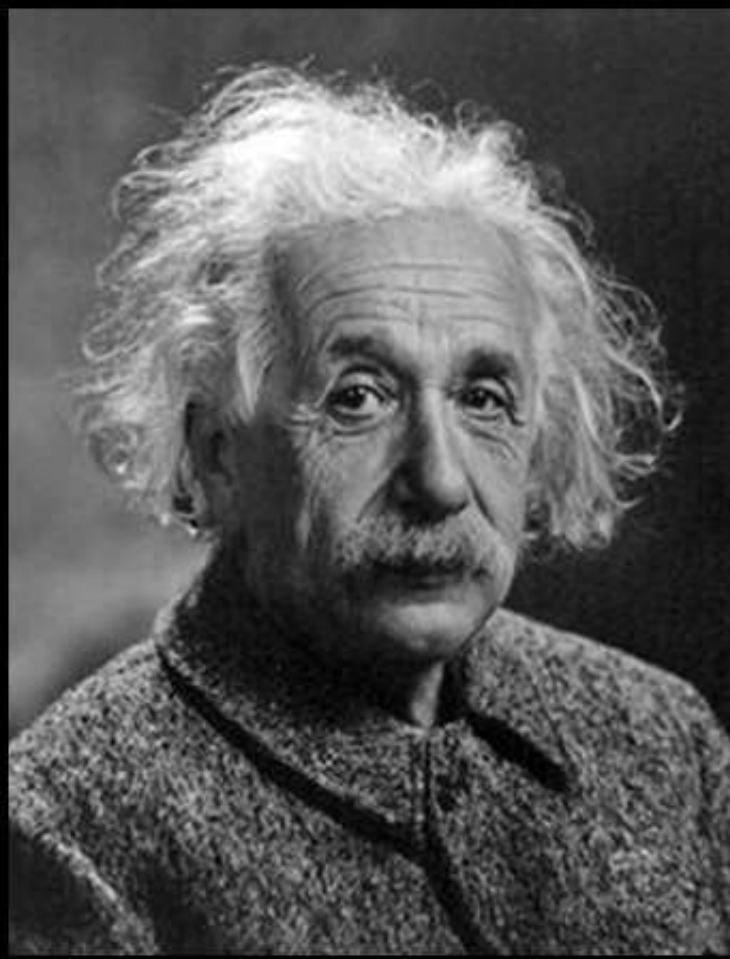
Stretch marks determines strong emotional tension especially in women as it affects the symbols of femininity, such as breasts, buttocks and abdomen.

**Moreover, stretch marks don't tan!**

***What therapy can we propose?***

***What kind of results can we make happen?***





*It's easier to  
break an  
atom than a  
prejudice*

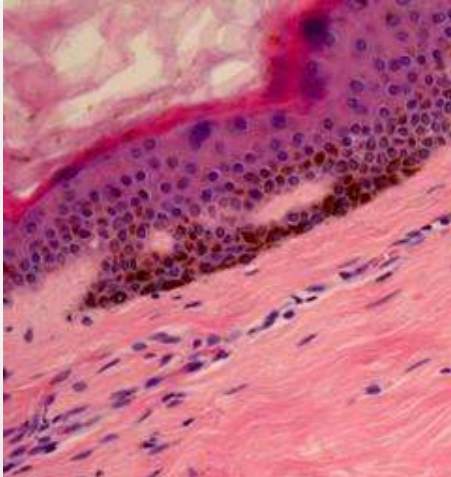
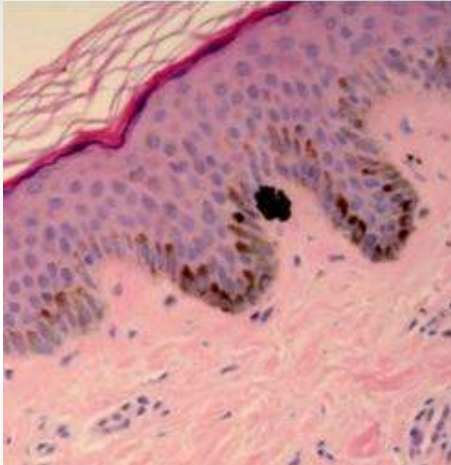
*Albert  
Einstein*

## Can we have these results?



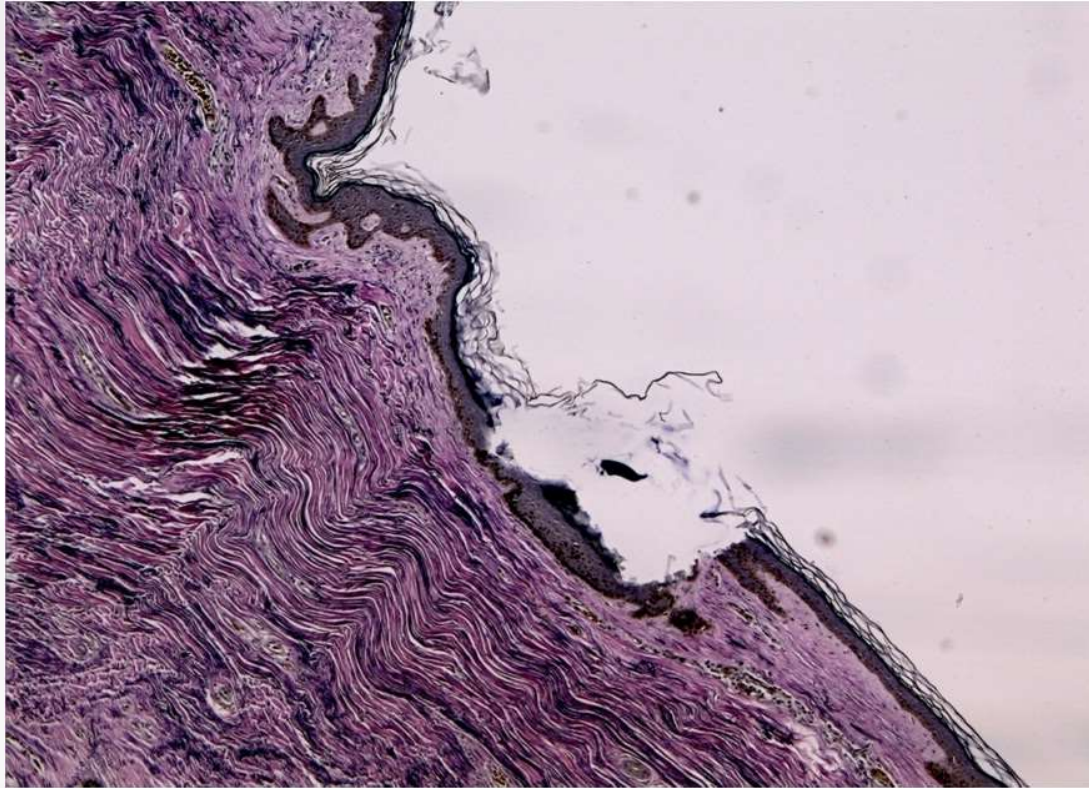
## Can we have these results?





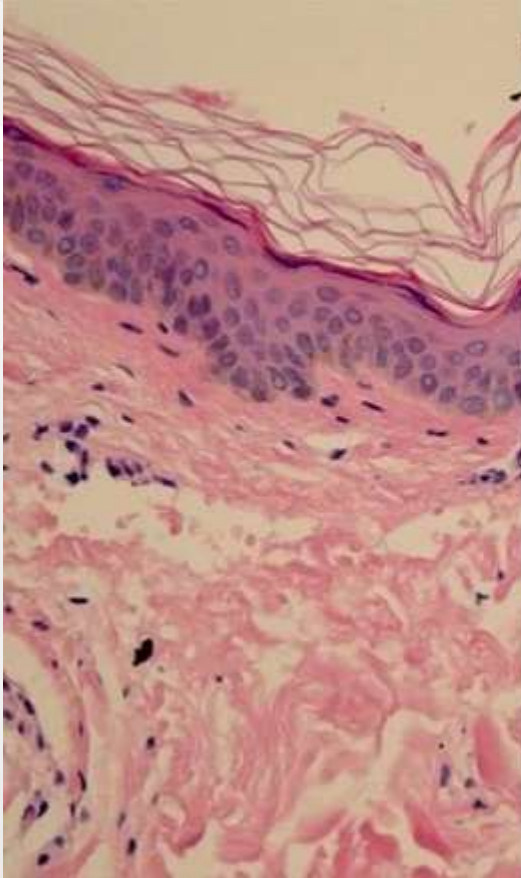
The onset of stretch marks causes the following reactions:

- reduction of skin vascularization
- reduced functionality of lymphatic system
- deterioration of matrix
- slow down of the activity of fibroblasts
- reduction of the thickness of dermis
- increase of the thickness of stratum corneum
- reduced skin transpiration

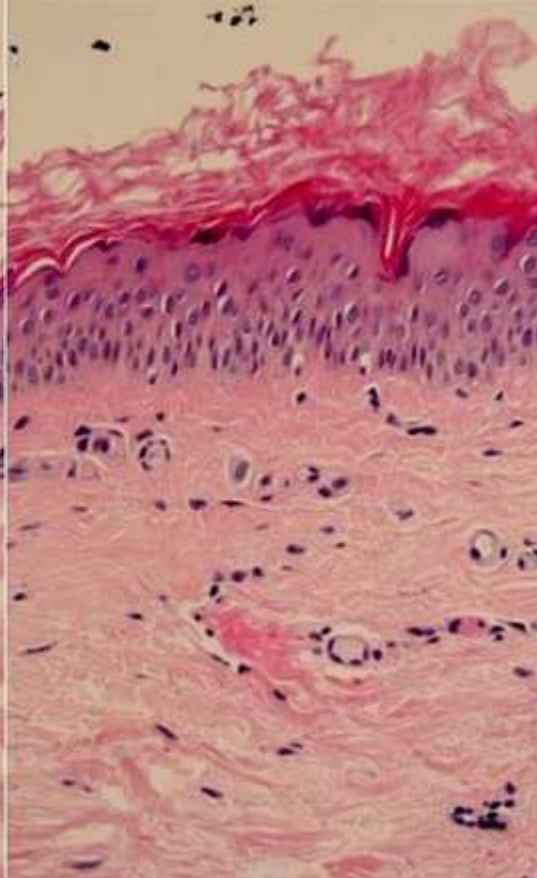


**From the biopsy it is evident that skin with stretch marks has a de-structured basement membrane, the thickness of its dermis is reduced and collagen and elastin are stratified, which appear parallel to the skin surface.**

Healthy skin



Skin with stria



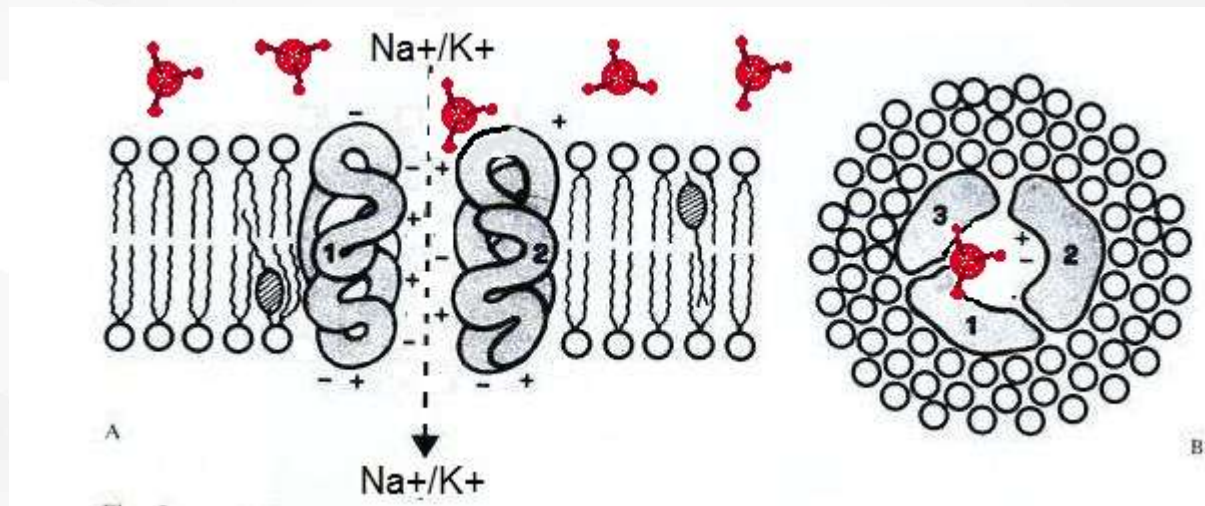
Minor oxygen supply  
Minor nourishment of the matrix  
Poor recovery of toxins

The matrix is poor of nutritional factors and they are transferred into the cell membranes with difficulty

Reduced supply of oxygen reduces the biochemical activity of fibroblast and diminishes the cell mitosis

**Toxins are electrical insulators and they slow down the pumping action of sodium and potassium**

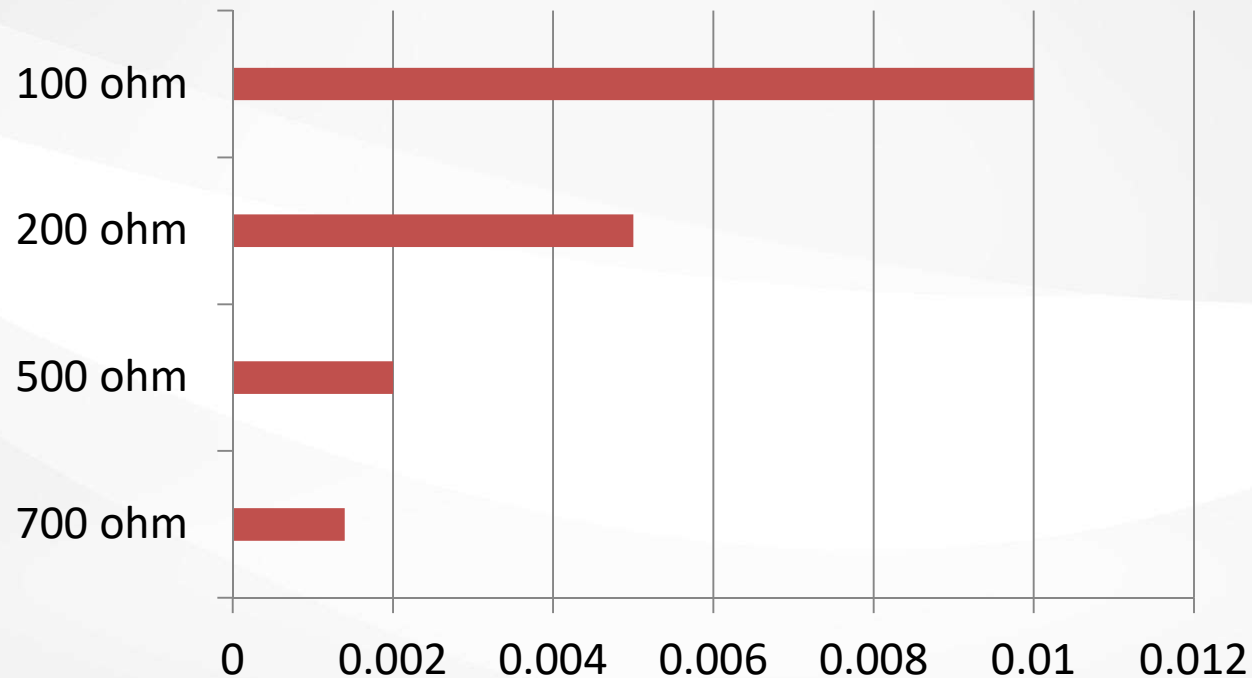
Toxins are not drained from the lymphatic microcirculation and increase the electrical resistance of the dermis from **100/200 Ohm** up to **500/700 Ohm** and slow down the pumping of sodium and potassium



Moreover, the presence of greater amounts of toxins constitutes a mechanical block that obstructs electropores and further impedes the pumping of sodium and potassium

## Movement of a 1 volt electric charge through biological tissues of different electrical resistance:

(100 ohm - young dermis / 200 ohm - dermis in old age / 500/700 ohm old stria more than 20 years)



**The increase in electrical resistance decreases ion motility (reduced pumping of Na<sup>+</sup> / K<sup>+</sup>)**

"With this study **for the first time we see a real restructuring of stretch marks without side effects.**

The most significant aspect is certainly given by the uniformity of the results, which **are definitely replicable on any subject,** as long as respecting the operative protocols."

A.Artigiani,G.Cervadoro,B.Loggini,A.Paolicchi  
*Biodermogenesi: la soluzione non invasiva nel trattamento delle smagliature*



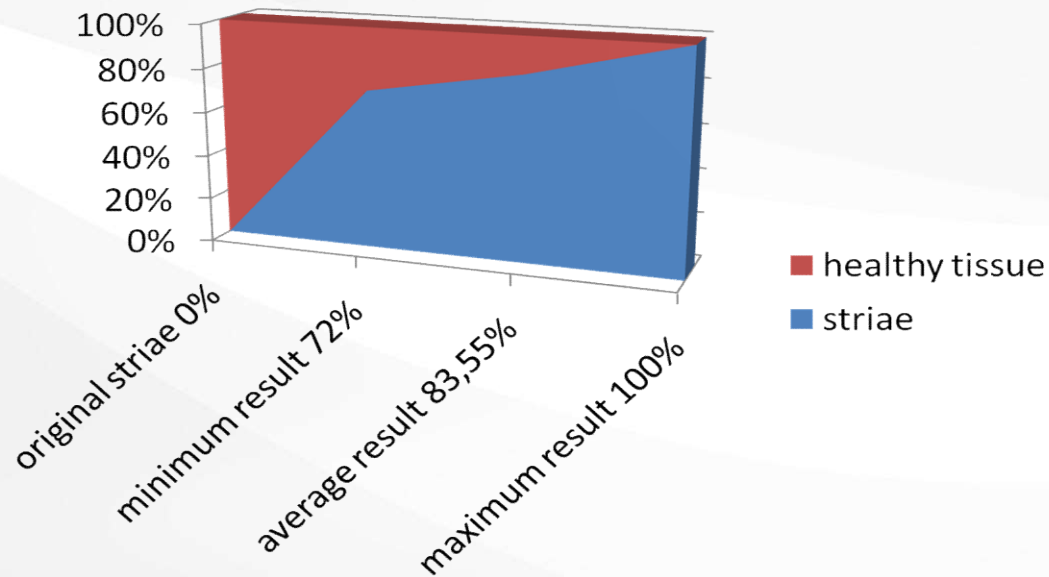
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U.O. Dermatology, physiotherapy and Follow-up Burns  
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### ***La Medicina Estetica – 2012/01***

Official journal of the Italian Society of Aesthetic Medicine, the International School of Aesthetic Medicine of the International Fatebenefratelli Foundation and the Italian Academy of Aesthetic Medicine.

# Biodermogenesi® for stretch marks treatment



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## The filling of stretch marks

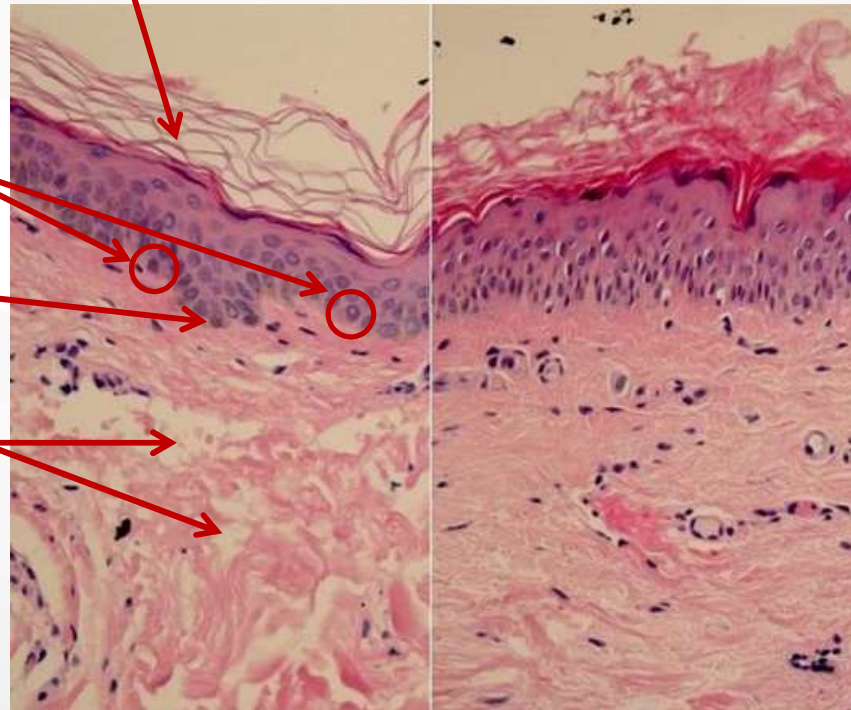
# Biodermogenesi® for stretch marks treatment

Reduction in the thickness of stratum corneum

Melanocytes

Renovation of the basement membrane

New non-fibrotic collagen type III



Stretch marks 7 years old after Biodermogenesi® treatments

Stretch marks 7 years old before treatment with Biodermogenesi®



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**Biodermogenesi® treatment for body is developed in two distinct phases:**

**First Phase – Soft peeling**

Reduces the thickness of stratum corneum of the striae;

**Second phase – Molecular and cellular regeneration**

This phase, called ACTIVE, combines for the first time the action of the biocompatible magnetic field, known for years for the regeneration of injured muscles, with the action of the vacuum, allowing the regeneration of collagen, elastin, neomelanocytes and skin cells, and with the stimulation with square wave of low intensity allows to transmit the active ingredients of the cosmetics in the dermis.

**B**iodermogenesi® treatment is based on the synergy, never used before, between electromagnetic field, vacuum and electrostimulation.

## ACTIVE PLUS HANDPIECE

Two-color diagnostic check-led in real time

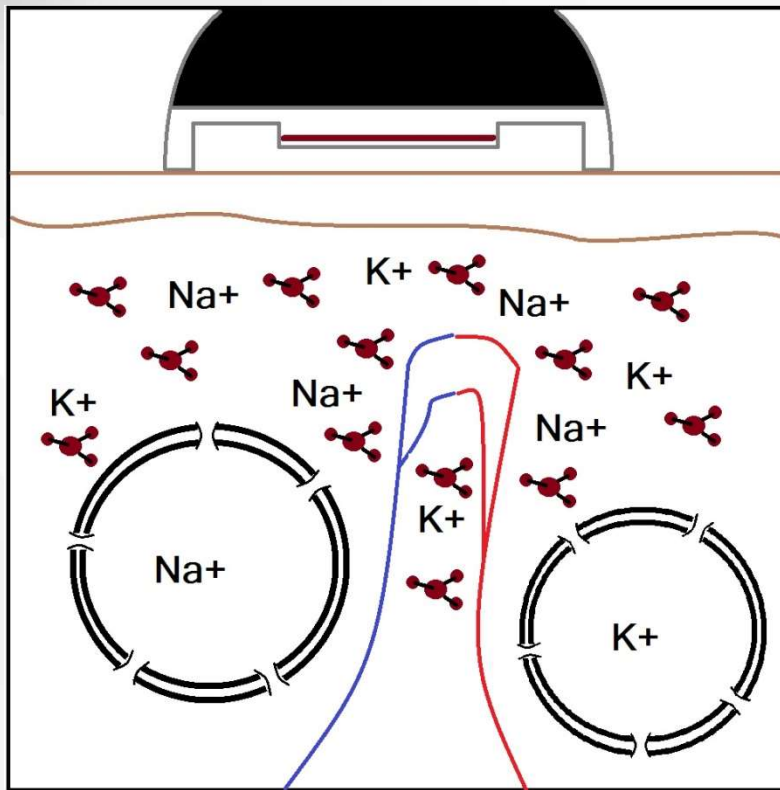
Electromagnetic field generator shielded disk

Chamber of air for the production of calibrated vacuum with varying intensity

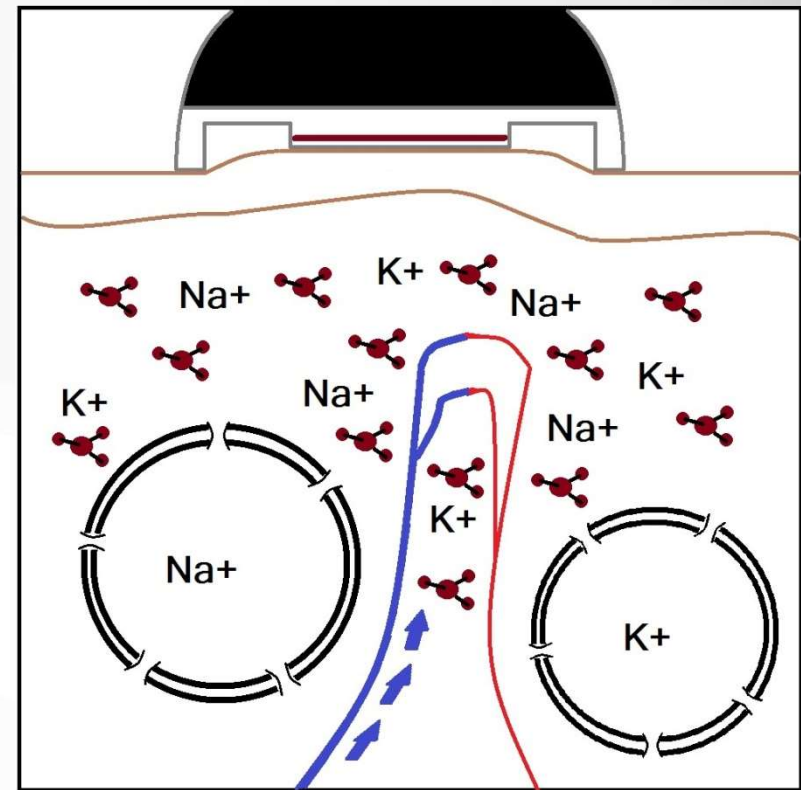
Group of electrodes for electrostimulation with rotation of the polarity

Disposable hygienic cover

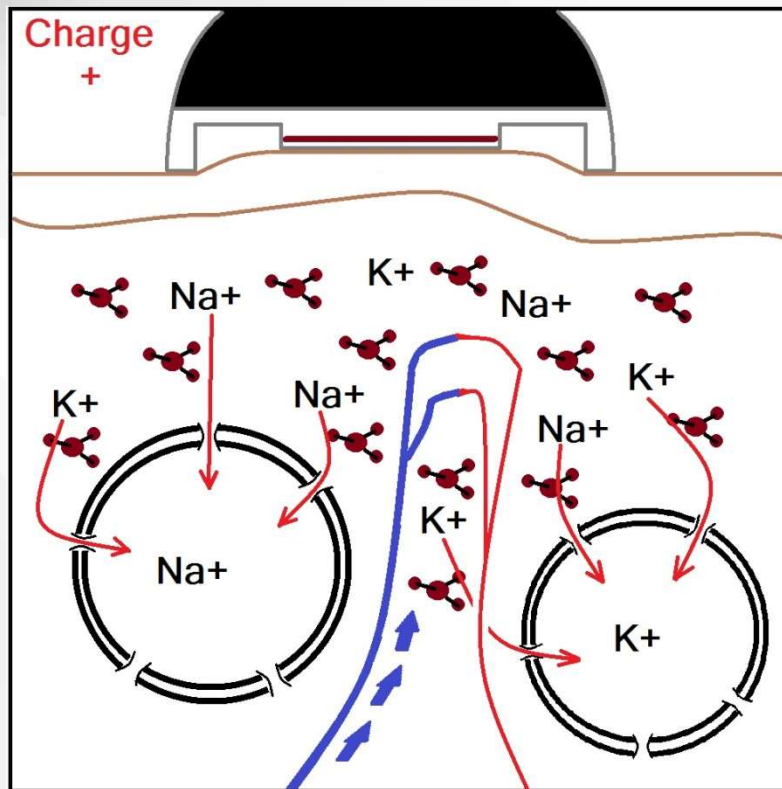




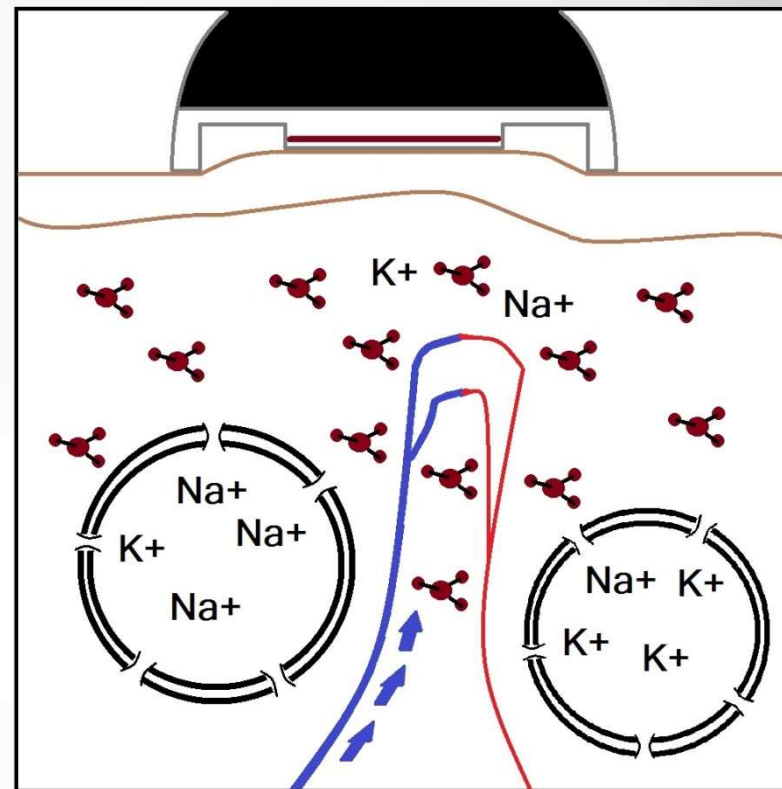
Here we simulate the action of the biocompatible electromagnetic field and vacuum on the skin surface. The electromagnetic field acts by varying the potential from positive to negative.



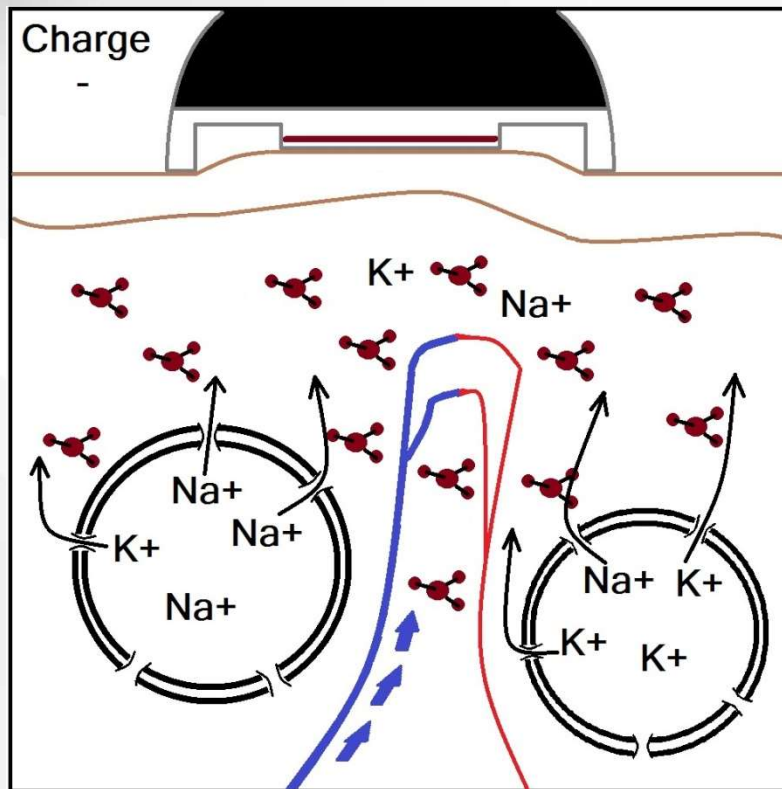
The action of the vacuum creates an immediate reaction against the arterial capillaries that pump oxygen-rich blood and nutritional factors on the surface, helping to improve the quality of the matrix.



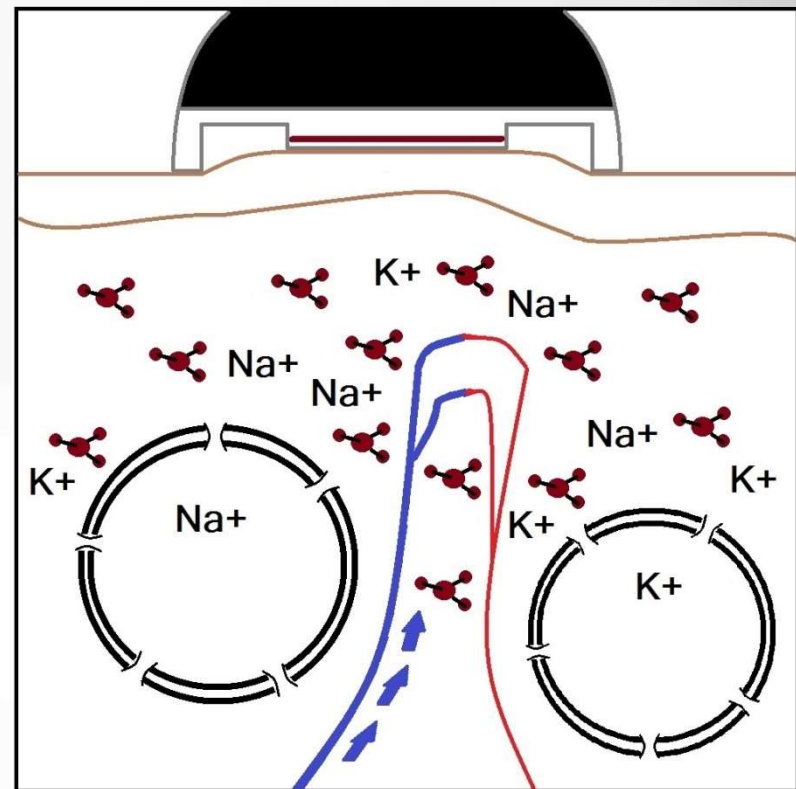
The positively charged magnetic field moves away sodium ions and potassium which tend to cross electropores of cell membranes.



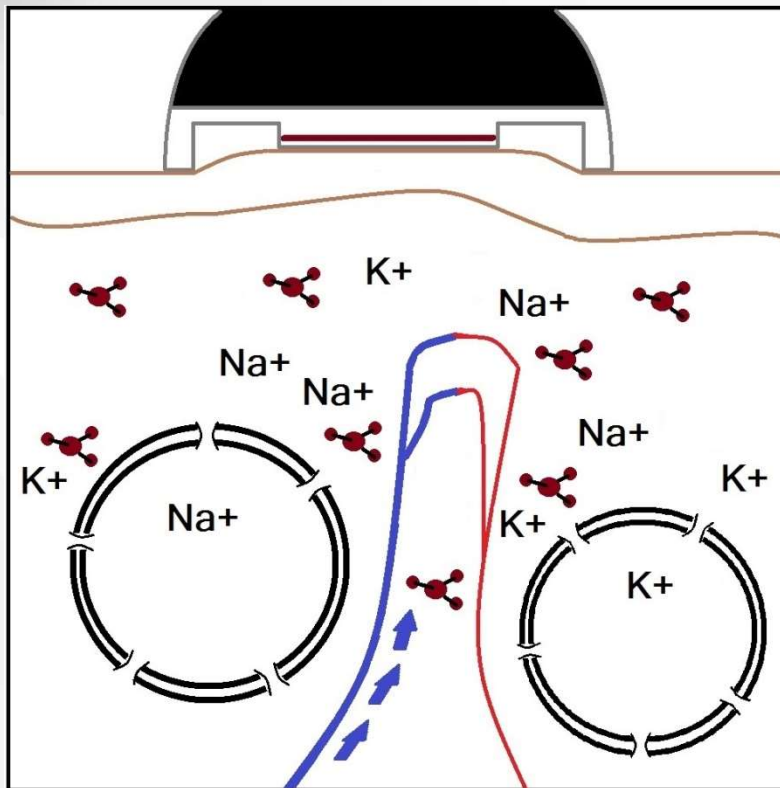
Sodium and potassium exceed the electrical resistance given by the increased amount of toxins and pass membranes thus enriching the skin cells and fibroblasts.



Negatively charged electromagnetic field recalls the ions of sodium and potassium to the outside of cell membranes.

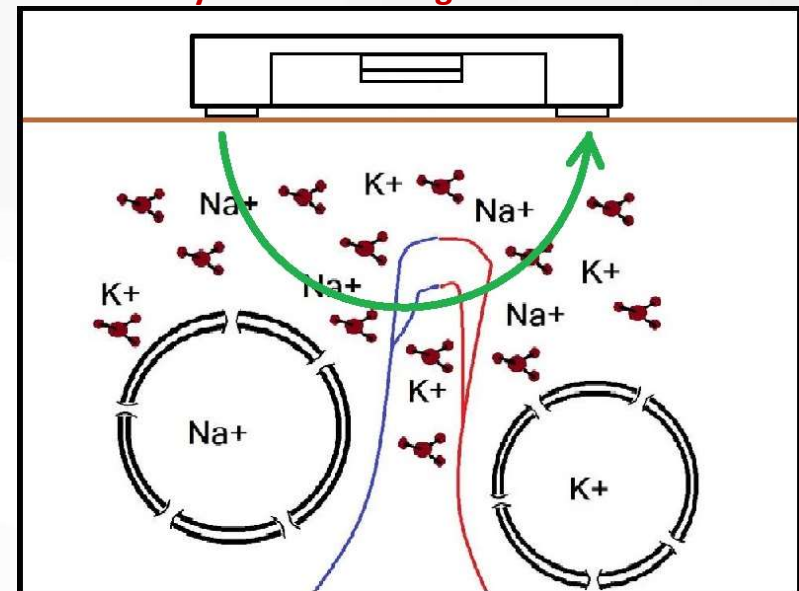


At the end of the supply of negatively charged electromagnetic field, sodium and potassium ions are attracted towards the outside of the cell membranes.

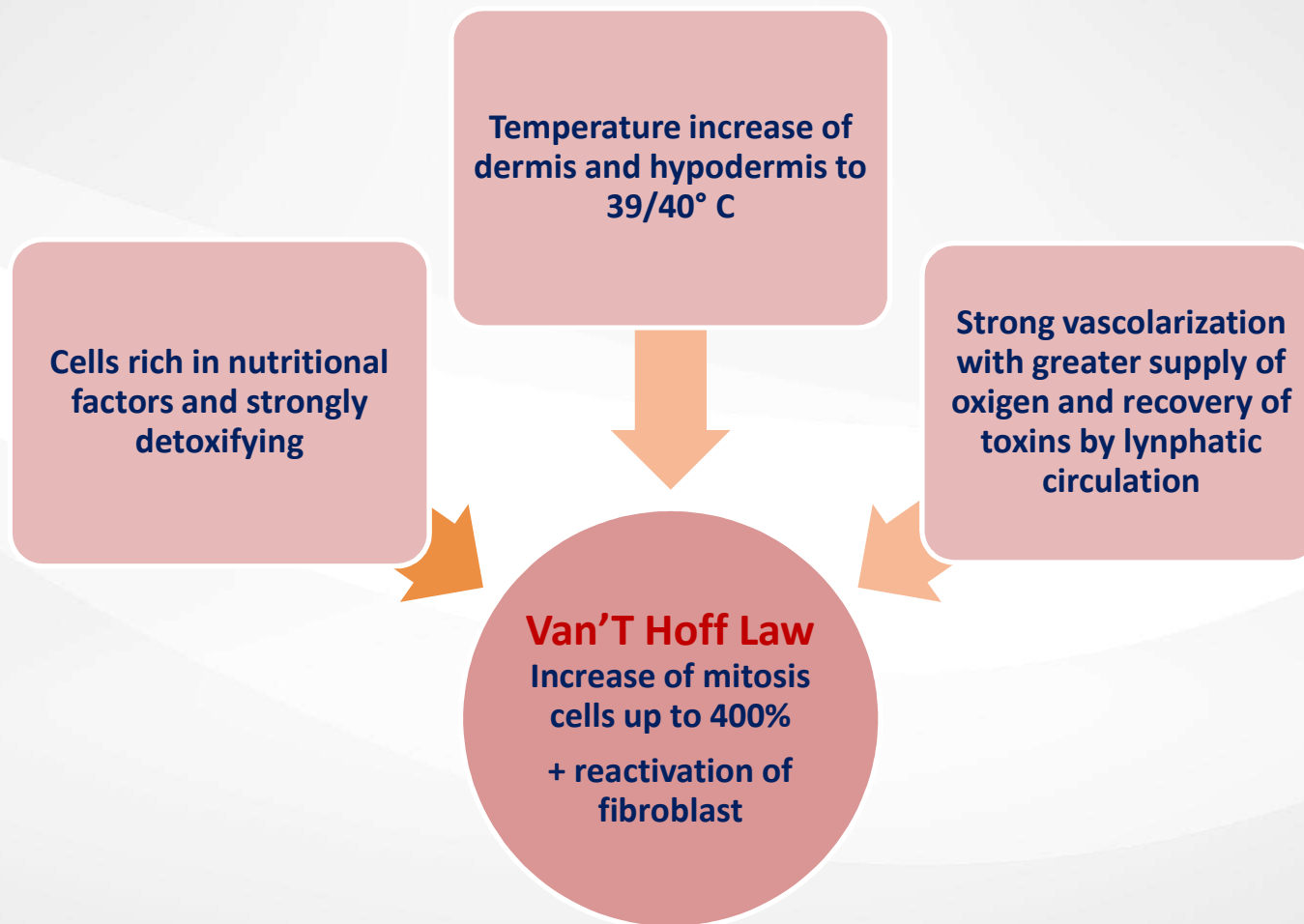


The action of the vacuum reactivates also the functionality of the lymphatic microcirculation, that begins to recover the toxins present in the extracellular matrix.

The new patent provides the delivery of a reversal polarity stimulation that passes through the skin tissue that will then be affected by the electromagnetic field



The electrons flowing from the electrodes through the dermis and the induced ion migrations considerably reduce the electrical resistance of the skin, thus allowing a more effective action of  $\text{Na}^+$  and  $\text{K}^+$ .





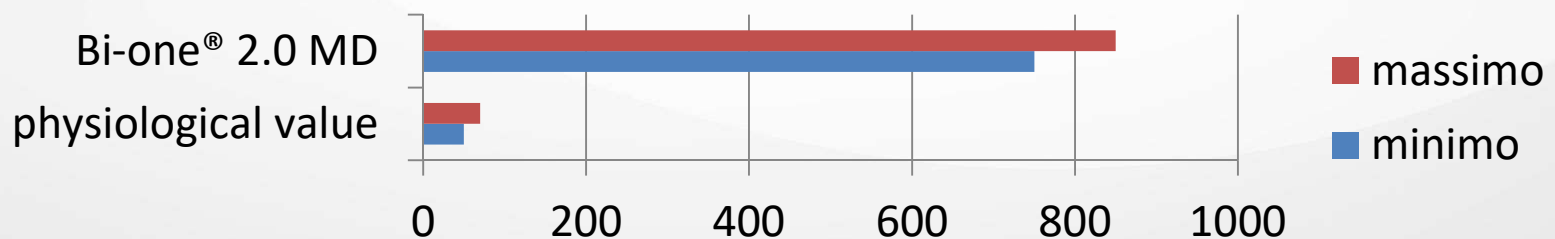
by

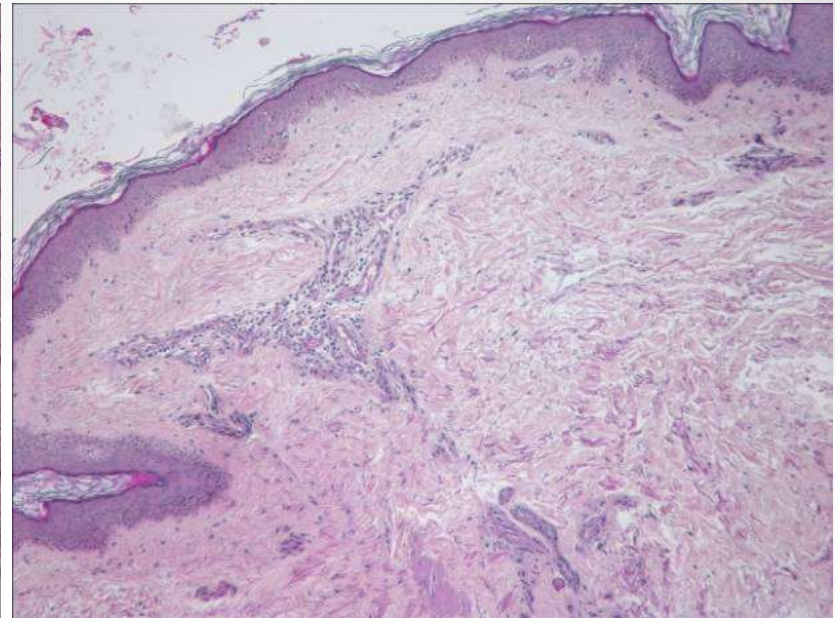
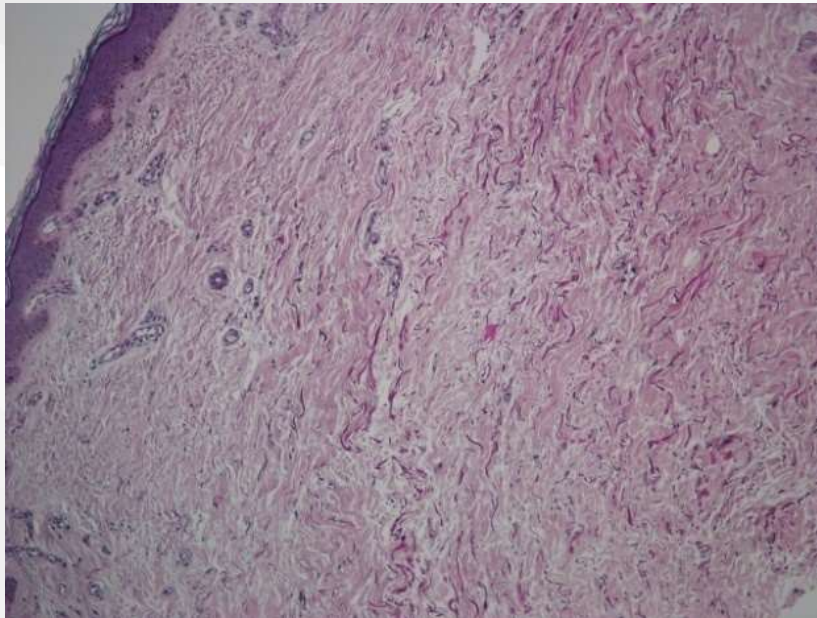


using a digital platform developed by NXP Semiconductors, of the Philips group, a bio-feed-back application has developed. With this application we can measure the speed of the electromagnetic field through the skin tissue, comparing the Bi-one devices (2012 model) and Bi-one 2.0 MD (model of 2018)..

**Physiological value** = ion acceleration between **50** and **70 mv**

**Bi-one® 2.0 MD** = ion acceleration between **750** and **850 mv**





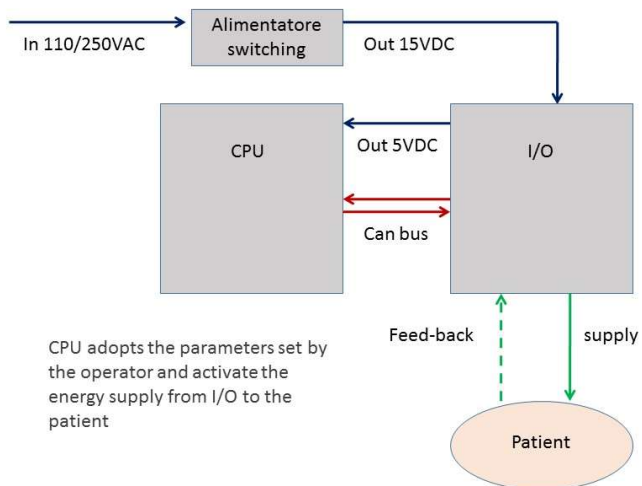
The effectiveness of the treatment of Biodermogenesi® is documented by several biopsies performed by Professor Bacci and by Dr. La Magra from ASL 8 of Arezzo which showed, **in just 2 days**, an increase in collagen and elastic fibers and a greater cell reproduction.

# bi-one<sup>®</sup> 2.0

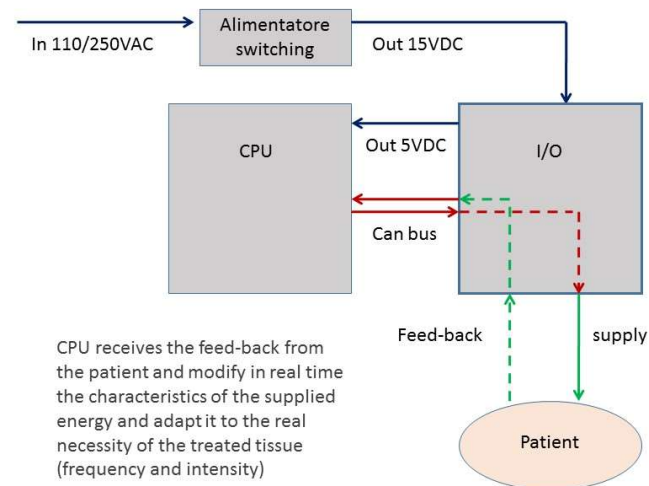
MEDICAL DIVISION

## The “Bio-feed-back”

### Structural concept of Bi-one<sup>®</sup>



### Structural concept of Bi-one<sup>®</sup>





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**BDG BODYSHAPING**

## FIELDS OF APPLICATION

Stretch marks, cellulite, skin hypotonia of body and breasts.

## WORK PROGRAM

From 6 to 12 sessions, determined in advance with the BODY SHAPING evaluation form, to be performed with a frequency of 1 or 2 per week.

## BENEFITS

### Stretch marks

- Effective stretch marks on any type of stretch mark and on all skin types\*
- Stretch marks fill with an average of 83.55%\*
- Reduction of the tactile sensation to the touch\*
- Tanning of the stretch marks on 100% of patients undergoing a complete cycle of sessions\*
- Absolute absence of side effects and down time\*
- Stable results after follow-up performed over 5 years

### Skin hypotonia of body and breasts

- Quantitative and qualitative increase of elastic fibers\*
- Increased firmness and elasticity
- Remodeling of the treated area

### Cellulite

- Reduction in volume and evidence of the nodule\*\*
- Greater uniformity and compactness\*\*
- New angiogenesis



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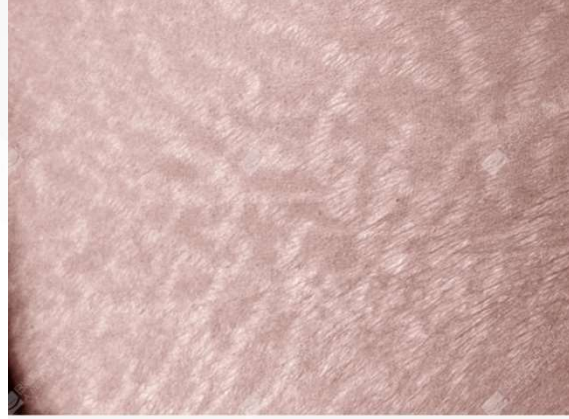
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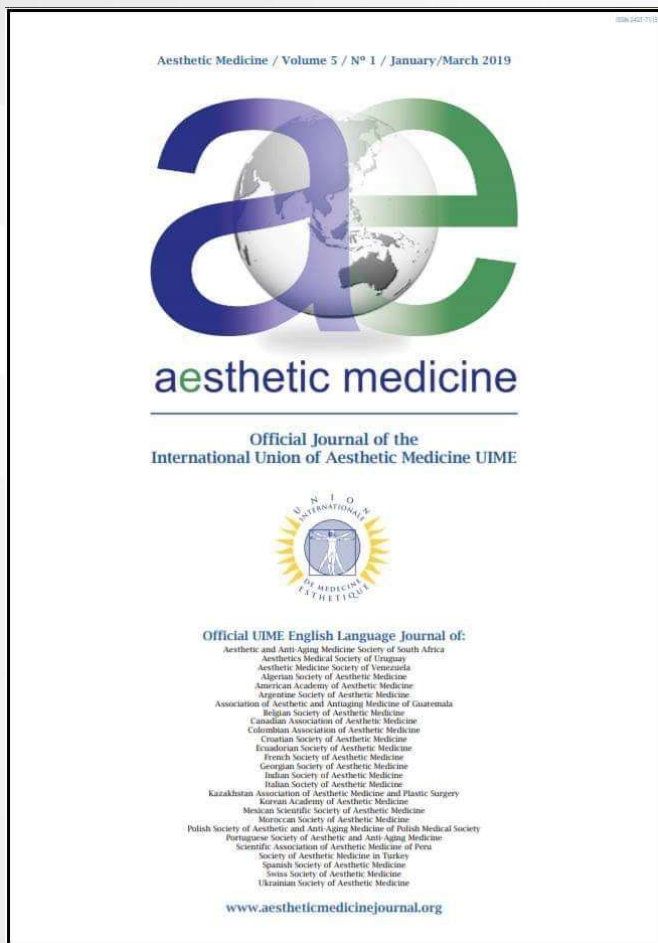


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Treatment of stretch marks aged more than twenty years with the synergy of electromagnetic field and vacuum. Clinical case studies and subsequent follow-up

Giovanni Alberti (1), Simona Laura (2)

- (1) MD, International School of Aesthetic Medicine of the Fatebenefratelli Foundation, Rome
- (2) MD, Arbitrator of the Italian Society of Aesthetic Medicine (SIME)



La cellulite si riduce, le smagliature si rigenerano, si riempiono e si abbronzano, le cute è più tonica ed elastica.



The results obtained with Bi-one® 2.0 MD are documented from Verona University with two studies recently completed:

- Biodermogenesi® in the treatment of stretch marks aging between 12 to 25 years
- Biodermogenesi® in the treatment of cellulite



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Tanning of the imperfection after 6 Biodermogenesi® sessions  
Archive: Prof. D. Amuso – Palermo University



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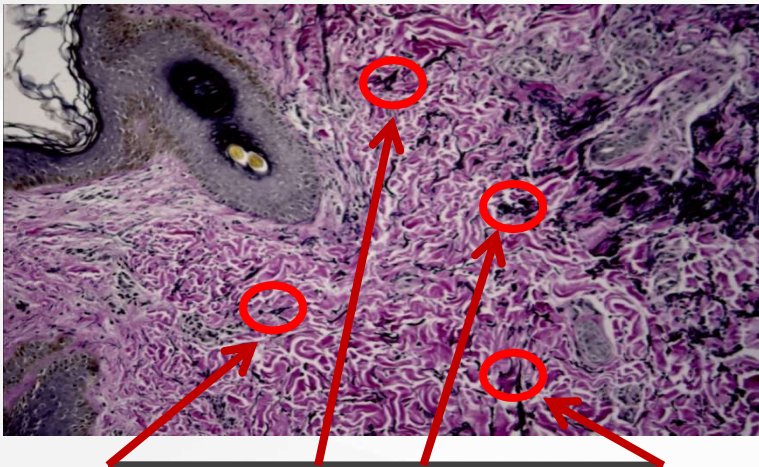
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## Biopsies carried out before and after Biodermogenesi® treatment (52 years old patient, phototype V)



Elastic fibers before treatment



Elastic fibers after Biodermogenesi® treatments



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**University of Pisa**  
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## Biodermogenesi®: Skin tone



## Biodermogenesi®: Skin tone



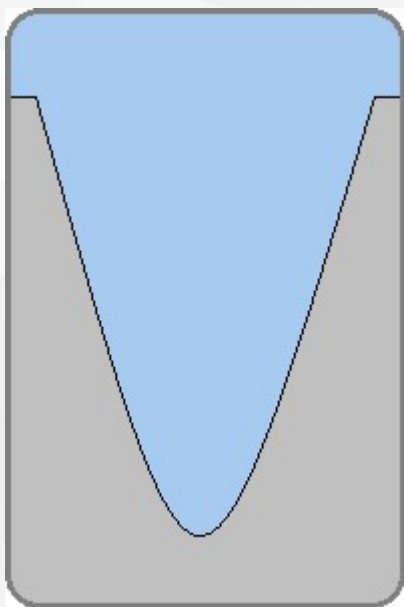


Biodermogenesi®	Fractional Laser
No side effects	Erythema and PIH Transient pain Hyperpigmentation Micro-crusting Edema It is not used on phototypes IV, V, VI
Improvement in all the patients	Improvement in some of the patients
Stretch Marks depressions improved minimum of 72% and the maximum of 100% (8)	Stretch Marks depressions improved by more than 50% (7) mean improvement 58% (7)
Follow-up with stabilisation after 5 years	No follow-up
Stretch marks tan	Stretch marks should avoid sun between 3 to 6 months

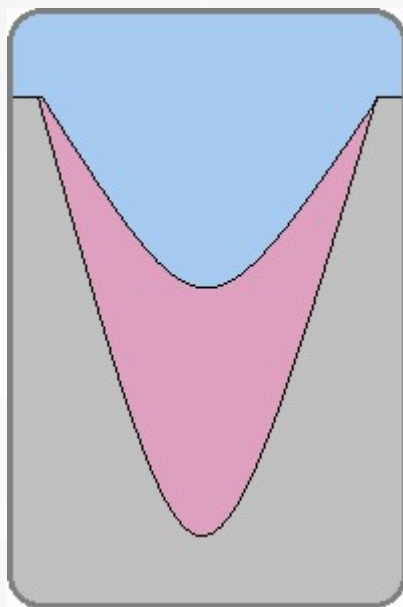


Maximum  
Filled: 58%

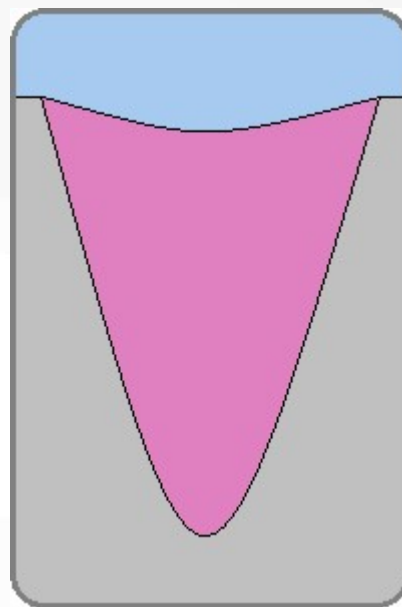
Average  
Filled: 58%



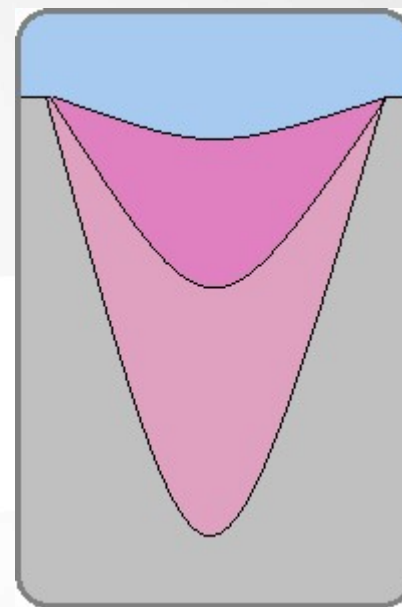
Stretch Marks



Stretch Marks  
after FL



Stretch Marks  
after BDG



Stretch Marks  
BDG versus FL



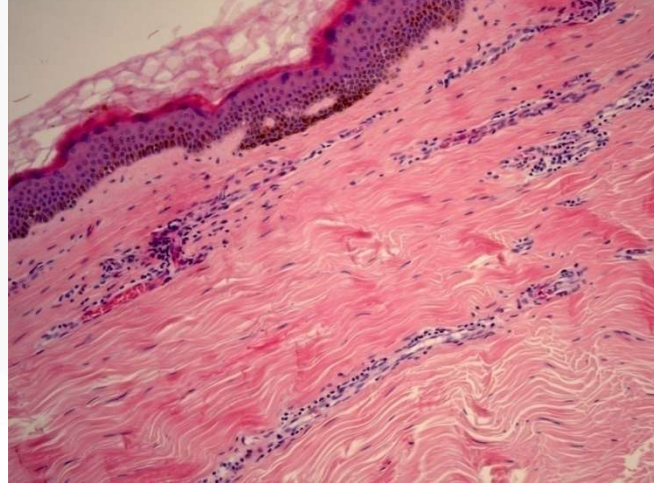
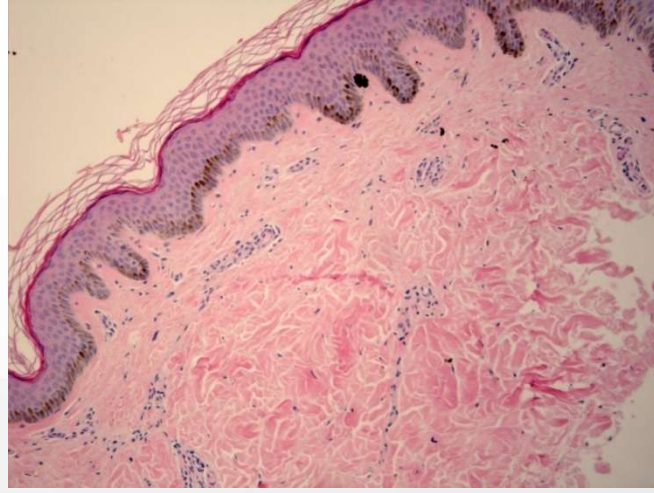
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*How many things  
that you may know  
or experience every  
hour, for so many  
centuries are  
ignored or falsely  
believed !*

*Lionardo da Vinci*

And  
more....



**BDG**DERMACARE

### FIELDS OF APPLICATION

Hypotrophic scars, hypertrophic scars, keloids, burn scars.

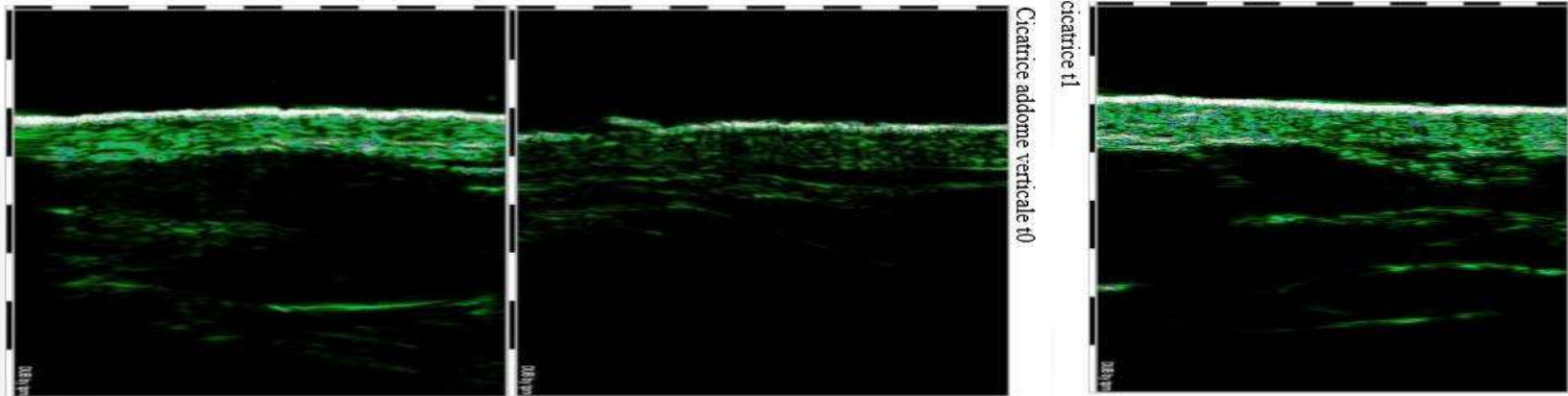
### WORK PROGRAM

**From 6 to 12 sessions on a weekly basis**

### BENEFITS

- **Filling of hypotrophic scars\***
- **Retraction and flattening of hypertrophic scars\* and keloids**
- **Reductions in fibrosis induced by scars\***
- **Remission or reduction of pain induced by scars\***
- **Recovery of joint motility reduced by scars\***
- **Softening of scars, even in the skin transplantation cases**
- **Reduction of skin discoloration\***

The structural organization of the regenerated collagen fibers recovers the optical properties like the healthy skin.  
Echography 1 (healthy tissue T0) and 3 (scar T1)  
(Absorption of light, refraction, reflection).  
Archive: Pavia University



Echography of the healthy tissue near scar and echography of the scar on abdomen before Biodermogenesi® treatment.

**On the right echography of the scar after Biodermogenesi® treatments.**

## Biodermogenesi®: Scar treatments



*“Regarding burn scars, we recorded a very good response to the treatment, both from the aesthetic point of view and above all the functional point of view. In one case of our study, a patient was suffering from chronic muscle-tension headache caused by a bridle scar at the level of the submandibular and cervical anteromedial regions. After the tenth treatment, we registered the remission of pain. At palpation, the scar tissue is considerably softer and more elastic, allowing a greater extension of the neck; the skin appears uniform to healthy tissue.”*

**Angela Faga**

*Full Professor of Plastic and Reconstructive Surgery  
University of Pavia*



# PHOTOMEDICINE and LASER SURGERY

Indexed on:



**Hypertrophic scar treatment with the association of monopolar capacitive radiofrequency, electric stimulation and negative pressure: an in vivo human experimental study.**

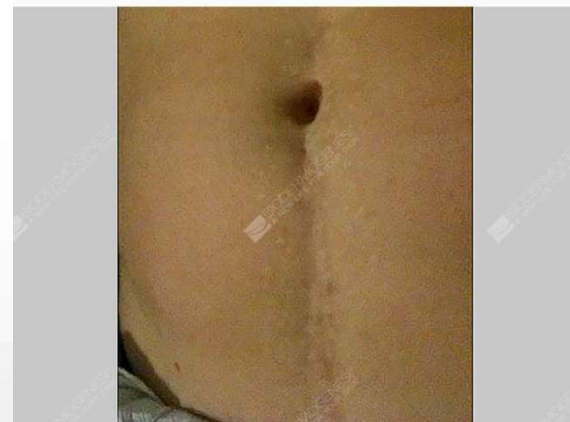
## Conclusions

*The combined sequential local treatment of hypertrophic scars with low intensity electro-magnetic and electric stimulation in association with negative pressure **demonstrated a favorable synergic effect on the scar collagen and elastic fibers network remodelling.** An amplification of the effects of three different well-known physical energies was therefore **obtained without any side effect.***

G. Nicoletti, O. Jaber, P. Perugini, S. Bellino, P. Capra, A. Malovini, A. Faga



## Biodermogenesi®: Scars treatments



## Biodermogenesi®



Before and after Biodermogenesi® treatment program. 42 years old patient with a scar due to a gunshot two years before the treatment. See the reduction of the deepness of the scar and the impressive chromatic uniformity obtained after Biodermogenesi® method. See also how stretch marks are perfectly regenerated and tanned and how the firming of the gluteus is improved.

Archive Beautyform – Istanbul – Turkey



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## **BDG**REVITALIZE

### FIELDS OF APPLICATION

Anti-aging treatment of face, neck and hands, forearms.

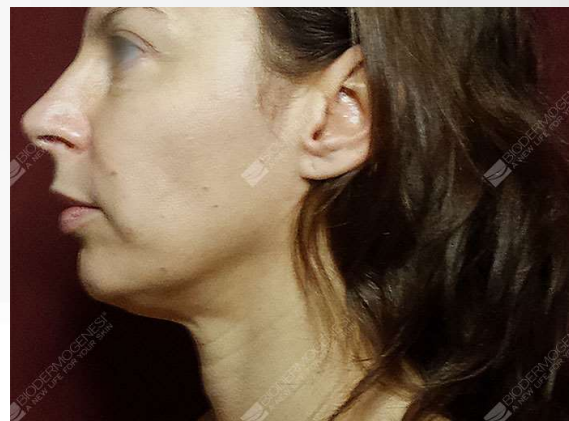
### WORK PROGRAM

**5 sessions with weekly or biweekly intervals with a maintenance session every two months**

### BENEFITS

- **Wrinkle reduction\***
- **Increased skin turgidity**
- **Increased skin hydration\***
- **PH normalization\***
- **Reduction of excess sebum\***
- **Reduction of the gravitational force effect**
- **Increased stromal substance\*\***

## Biodermogenesi®: Anti-aging



26.05.2014 17:09



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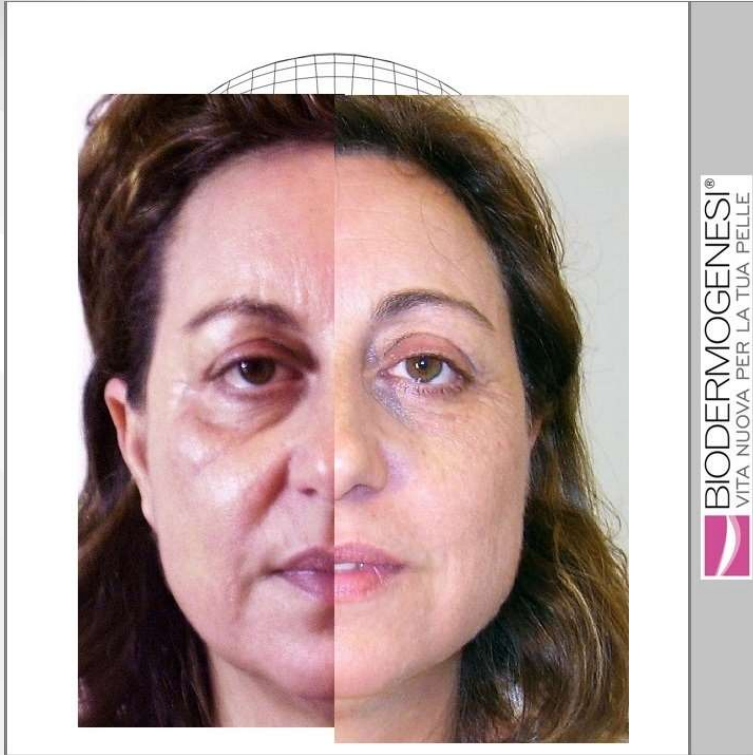


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VITA NUOVA PER LA TUA PELLE

## Lemperle Scale

Average severity level of the wrinkles in T0 = 2

Average severity level of wrinkles in T1 = 1,43

**D = 2 su 3,43**

### Analysis of the wrinkles:

forehead	T0 = 2	T1 = 1	D = <1	glabellar	T0 = 3	T1 = 1	D = <2
periorbital	T0 = 4	T1 = 2	D = <2	nasolabial	T0 = 4	T1 = 2	D = <2
Marionette	T0 = 4	T1 = 1	D = <3	angle of the lips	T0 = 4	T1 = 1	D = <3
chin	T0 = 4	T1 = 2	D = <2				

Gottfried Lemperle, M.D., Ph.D., Ralph E. Holmes, M.D., Steven R. Cohen, M.D., Stefan M. Lemperle, M.D.: A classification of facial wrinkles – *Plastic and Reconstructive Surgery* 2001 Nov; 108(6): 1735-50; discussion 1751-2

## Analysis of skin hydration, sebum and pH level on 82 patients aged between 42 and 81 years

	Valori corretti (VC)	T0 (VM2)	T1 (VM2)	D
Sebum	<b>100/130</b>	<b>147,50</b>	<b>128,62</b>	<b>&lt; 18,82 / &lt; 12,8%</b>
Hydration	<b>50/70</b>	<b>42,50</b>	<b>57,58</b>	<b>&gt; 15,08 / &gt; 35,5%</b>
pH	<b>5,5/6,5</b>	<b>7,18</b>	<b>6,48</b>	<b>&lt; 0,70 / &lt; 9,75%</b>

The average values of sebum, hydration and pH encountered on 82 patients after 5 sessions of Biodermogenesi® align all to the optimum predicted values (T1 VM2).

## Analysis of the response to treatment based on decades of age

Age group	At least 2	%	All 3 parameters	%
From 40 to 50 years	<b>0</b>	<b>0%</b>	<b>25</b>	<b>100%</b>
From 51 to 60 years	<b>6</b>	<b>18,75%</b>	<b>26</b>	<b>81,25%</b>
From 61 to 70 years	<b>9</b>	<b>52,94%</b>	<b>8</b>	<b>47,06%</b>
From 71 to 81 years	<b>6</b>	<b>75%</b>	<b>2</b>	<b>25%</b>

In the analysis, we can see that even patients of advanced age have had an improvement in all three parameters. In the group of 40 and 50 years, all the data are in line with the expected optimal values (25 out of 25). In the most advanced group, between 71 and 81 years, 2 out of 8 have all the parameters in line with the optimal values, while 6 out of 8 have at least two of these parameters in line with the expected optimal values.



**BIODERMOGENESI®**  
A NEW LIFE FOR YOUR SKIN



**EXPO ITALIA**  
MEDICAL AND WELLNESS SOLUTIONS



**EDU.CARE**  
DIGITAL CARE LEARNING PROJECT





## I PLUS DI BIODERMOGENESI®

Biodermogenesi®, in its various fields of application, is characterized by:

- **Effective result in over 95% of treated cases**
- **No side effects**
- **No down time**
- **No limitation of the patient's lifestyle**
- **No limitation to sun exposure**
- **Class I medical technology, which can also be used by nurses and therapists**



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A NEW LIFE FOR YOUR SKIN

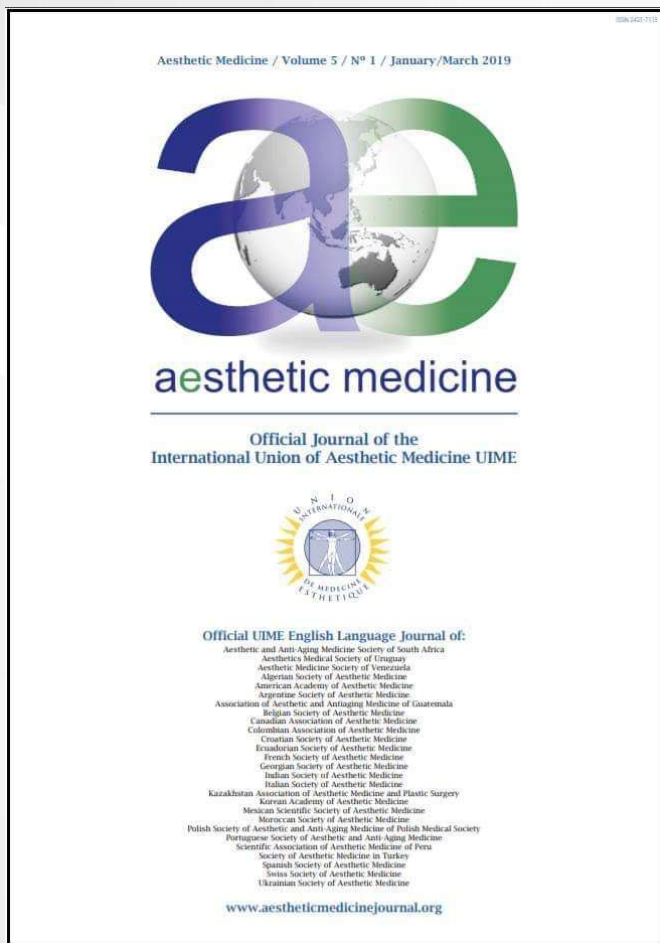


**EXPO ITALIA**  
MEDICAL AND WELLNESS SOLUTIONS



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E-SPOTIAL CARE LEARNING PROJECT

Thank  
you



Treatment of stretch marks aged more than twenty years with the synergy of electromagnetic field and vacuum. Clinical case studies and subsequent follow-up

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