



Aesthetic Dermal

# ExcellDerm<sup>®</sup> Pro

Veritable alternative to traditional mesotherapy

Without needles, without pain



B o d y & F a c e S o l u t i o n s

# ExcellDerm® Pro

Aimed at cosmetic medicine professionals.

It produces the same effects as traditional mesotherapy, without needles, without pain.

The skin acts as a natural barrier against the entry of foreign substances into organism. In order for a substance applied to the skin to be absorbed trans-epidermally, it must pass the corneous stratum.

This is what is achieved with the [ExcellDerm® Pro](#) electroporation equipment.



## N.T.U.R.: Non Thermogenic Unipolar Radiofrequencies

It is an alternative to traditional mesotherapy, without needles, without pain and extremely efficient and reliable, as it enables us to introduce the desired medication to the depth required by each treatment. It can be used in different therapies: pain, obesity, flaccidity, cellulite...

### How does N.T.U.R system works?

The system emits electronic impulses by means of a high frequency and low intensity mechanism. These act by permeabilising the cellular membrane and easily and quickly permitting the introduction of active principles directly to the cell (from 0.25 to 1.50 grams per minute), thus speeding up the duration of the patient's treatment.

### How does ExcellDerm®Pro act at the cell level?

It causes a state of biological stress, altering the membrane potential, causing an electroporation of the bilayer lipids, giving rise to the formation of pores and openings in the protein channels. This N.T.U.R phenomenon is achieved at the time of the electromagnetic wave impulse and it is reversible, because this is by pulses and not maintained, with which the cell returns to its state of normality. The cell recuperates its integrity when the membrane potential is normalized due to a so-called "on-off" mechanism. Substances can pass through the tissues:

- By transcellular way: This increases the permeability of the cellular membrane.
- By interstitial way: Through the lipids of the intercellular space.

### With the ExcellDerm®Pro - N.T.U.R electroporation system substances pass through the skin:

- By transepidermal way: The substance crosses the skin as it overcomes the barrier of the corneous layer.
- By pilosebaceous way: The absorption takes place through the epithelial cells of the sebaceous glands. This is used by hydrolipidic and lipidic products.
- By sudoriparous way: At cell level of the sudoriparous glands. Ionic products use this.

### Advantages over other transdermal transport techniques or systems:

- There is no electronic contact with the patient. So there is no risk of chemical burns, muscular fasciculation, pain or inflammation.
- It is not invasive.
- It has no return electrode (ground plate).
- It is not contraindicated in prosthesis.



- There is no molecular ionization of the transported substances.
- It is valid for ionic, non-ionic and lipidic substances.
- The speed of transcutaneous penetration of the hydrolipid products is approximately 1 gram per 60 seconds.
- It does not require any conductor gel.
- It has no secondary effects.
- Practical, transportable and easy to handle.
- It introduces substances of any molecular weight.

#### Indicated in:

- Anti-aging
- Cellulite
- Obesity
- Flaccidity
- Hair loss
- Melasma
- Dark circles
- Stretch marks
- Facial treatments

Electroporation by radio-frequency is a very reliable techniques which can be adapted to multiple therapies and opens up the way to numerous possibilities.

#### Contraindications:

- Patients with pacemakers
- Pregnant women
- Severe acne
- Epileptic patients



## Body & Face Solutions

Clearing up concepts

### Why do we say that N.T.U.R. system is not an iontophoresis?

Iontophoresis is the transdermal vehicle for small ionic agents, but in case, for example, of rosehip, collagen, etc., they are not normally introduced through iontophoresis, because their molecules are too big.

### Why do we say that N.T.U.R. system is not a phonophoresis?

Phonophoresis is the transdermal vehicle for small agents that require a conductor gel. Electroporation does not need this.

### Why do we say that N.T.U.R. system is not a mesotherapy?

Traditional mesotherapy required injecting with a needle and it consists of the transdermal penetration of any ionic or non-ionic agent. However, it does not guarantee intracellular penetration and causes pain, ecchymosis, oedemas, etc. That is why we say that electroporation is not mesotherapy. Electroporation produces the same effects as traditional mesotherapy, but without contraindications.

### What is the N.T.U.R. system, then?

N.T.U.R is the transdermal penetration of any ionic or non-ionic active principle with molecules of any size, hydro or liposoluble, transported by a liposomed complex.

N.T.U.R is a revolutionary technique that is able to increase the cellular capturing power, as it manages to facilitate the passing of substances through the cellular membrane. Thus, we will induce the opening of two channels of the cellular membrane (protein channels) and pores in the cell which become more receptive to the application of substances.

We also use the aqueous channels, known as "Aquaporines", as a cellular penetration way. These were discovered by the North American doctor, Peter Agre and Roderick Mackinnon, who were awarded the Nobel Prize in Chemistry in 2003. The technique that carries out the penetration of substances through the opening of the aqueous channels, induced by the application of an electromagnetic wave, is known as I.M.R.F.

That new technological concept appeared almost five years ago, when Dr. Praunist discovered the phenomenon of N.T.U.R It refers to the transitory inversion of the rest potential of the cellular membrane, induced by the emission of an electromagnetic wave (EMW) with special characteristics.



## Technical Specification:

### General

• Power Input	100-230 Vac 50/60 Hz
• Maximum Power Consumption	50 W
• Classification(EN60601-1)	Class 1, type BF
• Mains Fuses	2xT2A (5X20 mm)
• Size (height x width x depth)	400x400x210 mm
• Weight	5kg

### Output Parameter

Carrier Frequency 0.6~1MHz Out  
Treatment Timer 0 to 60 minutes  
Safety Device Zero Start

### Environmental Conditions for Transport and storage

- Temperature -10 to + 35 C
- Relative Humidity 5 to 95%
- Atmospheric Pressure 500 to 1060 hPa

The [ExcellDerm®pro](#) is designed to operate from any 50/60 Hz single supply between 100 and 230 Vac. All information on model, serial number, and month /year of manufacture is located on the rear panel



## Instructions of the way of use:

The operation of ExcellDerm®pro is extremely simply.

Front Panel2054

1. Connect the machine power cable to the mains.
2. Connect the switch situated at the back of the machine. The power light will come on.
3. Connect the facial head (small) on the Face connector (blue) to the corporal head (large) on the Body connector (yellow), depending on the treatment to be carried out.
4. Choose the penetration level by pressing mode:  
Slow: superficial level  
Fast: deep level
5. Programming operation time  
Upward arrow: raise number
6. Apply enough solution (**Aesthetic Dermal 's perfect cocktails**) for RF treatment to desired part.
7. Select the output program to a proper level (Normal or Sensitive) and then try to massage moving the probe in circular way on desired part.

Move the probe with maintaining its surface touching to skin basically in right angle, and from center to outer , from down to upward on one's face and body.

- A beep will indicate that the programmed time has finished.

Note: The heads of the equipment are the most delicate part of the machine. We advise storing them after treatment in a suitable place, to avoid rubbing or falling. Do not use alcohol or products with alcoholic content.

### *Cautions!*

*Use this equipment massaging moving circular way*

*Use it 1 time a day, and if you want to apply the ExcellDerm®pro to same part of your same patient's body again in a day then should use this equipment only offer 6 hour interval.*



# N o n e e d l e m e s o t h e r a p y

## P r o t o c o l

Meso-abrasion

1. Skin disinfection
2. Slow - soft - gentle - superficial  
Sand paper abrasion (Abrasion Kit)  
No one blood drop should appear => Not painful abrasion  
Only just remove stratum corneum

Meso- N.T.U.R.

3. Apply the mixture directly on the skin cover with a plastic sheet (avoids evaporation)  
Deep penetration immediately begins
4. Use electroporation during few minutes  
Penetration enhances +++

### *Safety Precautions*

*Must not be applied to backbone, eye, heart, pregnant womb ,  
good or bad tumor and tuberculosis.  
Not suitable for the application to the following: bleeding,  
circulation troubles (thrombus arterial sclerosis, etc,...)  
acute inflammation of joint and bone , suppuration of soft tissues, etc.*

*Patients with heart pacemakers bad/or other electronic implants  
Electro Therapies or diagnoses should never be employed  
on patients with electronic implants, such as heart pacemakers, without obtaining prior approval of a  
specialist.*

*Use only certified-safe accessory items.  
Use only those accessory items listed in  
the equipment's instructions manual.  
Any other accessory items employed should be certified as safe for such use by a testing authority.*





ExcelDerm® Pro  
+  
Perfect cocktails

BoNta 568®

3 OLIGOPEPTIDES



Anti Aging  
Relaxing  
Refilling

XL Hair®

47 ACTIVES

Hair Energy



Reparestim®

61 ACTIVES



Anti Aging  
Relaxing  
Refilling

Body & Face Solutions



P e r f e c t   c o c k t a i l s

+

D a i l y   c a r e

Daily Care help to optimise and prolong  
The professional medical results obtained

## BoNta 568® Daily Care



Dermocosmetic serum helps to maintain the skin  
relaxed and smooth for a long time

## XL Hair® Daily Care

Capillary regenerator

Revitalizes and strengthens



## Reparestim® Daily Care



Repairs

Refills

Stimulates and plumps the skin

B o d y   &   F a c e   S o l u t i o n s



aestheticdermal.com



B o d y & F a c e S o l u t i o n s



Aesthetic Dermal, S.L.  
C/Pla de l'Estany, 29 Poligon "El Pla" – Illa F2 –Parc 2  
17486 Castelló d'Empuries (Girona) SPAIN

[info@aestheticdermal.com](mailto:info@aestheticdermal.com)  
[www.aestheticdermal.com](http://www.aestheticdermal.com)

B o d y & F a c e S o l u t i o n s