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## EL12002 TCARE

This new device, unlike the Tecar and Endotherapy electro-medical devices, allows the physiotherapist to use simultaneously two treatment methods, combining the resistive/capacitive energy transfer and the diffusion of the active agent (where prescribed by the physician), with a hand piece called ROLL-ON (patented).

### CAPACITIVE MODE

The warming sensation generated inside the body depends on various factors, and can be perceived by the patient at intensities that range from warmth to intense internal heat. When using capacitive electrodes, the diameter of the electrode and speed of movement must be considered in particular. For the same amount of power applied, larger diameter electrodes increase the temperature more gradually and, in addition, the faster the electrode is moved, the less the heat sensation felt by the patient.

#### *Gastrocnemius treatment example - CAPACITIVE MODE*

The operator transfers energy and medicines into the patient's gastrocnemius muscle. The effect will be hypervascularization of tissue, and consequently its filling with oxygen, nourishing factors, enzymes on the arterial side, and drainage of catabolites on the venous side.

It is good practice to choose the electrode with the largest area possible in relation to the area to be treated. The electrode can be applied, both staying still in the area treated and using circular or linear movements, depending on the area treated and power you wish to apply. It is very important that most of, if not all of, the electrode's area be in contact with the patient's skin, following any curves and irregularities in the area treated, and continuously adapting to it. The electrode holder handgrip is specifically designed to minimise effort on the part of the operator and to make the treatment more pleasant for the patient (deep massage action, as if the electrode were an "extension of the operator's hands").

### MANUAL MODE WITH DIRECT - RESISTIVE COUPLING

Direct coupling means using the TCARE Cellular Regenerator with uninsulated metal electrodes (no dielectric device interposed). The action mechanism, caused by polarity reversal of the current, produces a quicker and more intense increase in heat in tissue deprived of water and electrolytes (bone tissue and adipose tissue especially). This application method is therefore more indicated, perhaps along with the capacitive mode, for pathologies involving these parts of the body. Since the active electrode is not insulated, the current that moves the charges and the temperature generated in the body are less concentrated in the area immediately below the active electrode, producing a directional aspect guided by the passive electrode (return plate).

#### *Knee treatment example - RESISTIVE MODE*

The operator gets the patient to move their knee into flexion/extension to concentrate Tcare action in the inflamed zone and gain a wider range of motion (e.g. knee collateral ligament)



FOR THIS ITEM  
THERE ARE VIDEO

In other words, one substantial difference from the capacitive mode lies in taking great care when positioning the return electrode, which directs impulses generated by the active electrode. Another difference is that the active electrode remains in a set position or slight rotational movements are made with a diameter slightly larger than that of the electrode used, and continually adjusting the power applied so that the temperature perceived by the patient is pleasant.

**THERAPEUTIC INDICATIONS:**

- Muscular injuries
- Joint capsulitis
- Distortions
- Cervicalia
- Bone and ligament trauma
- Tendon injuries and bursitis
- Lumbalgia and ischialgia
- Myositis
- Arthrosis processes
- Rehabilitation programmes

**BIOLOGICAL EFFECTS OF THE TREATMENT:**

- Improvement of arterial flows, with an increase in the quantity of nutritive substances and oxygen
- Increase in metabolism due to these factors and due to an internal rise in temperature (van't Hoff's law)
- Increase in endocellular energy transformation (ADP into ATP)
- Improved membrane balance for all cells in the treated area (adipocytes, fibroblasts, etc.)
- Repolarisation of the cell (from pathologies -40Mv to physiologies -70Mv)
- Passage of the extra-cellular matrix from a (pathological) gel state gel state to a (physiological) sol state
- Improvement of venous and lymphatic flow with more efficient expulsion of toxins and catabolites
- Potentiation and synergy with active ingredients to be diffused in the dermis and hypodermis, with evident application advantages compared to taking intramuscularly

**ACCESSORIES SUPPLIED:**

- EL0147 - Mini Capacitive ROLL-ON 40 mm
- EL0163 - Mini Resistive ROLL-ON 40 mm
- EL0164 - Medium Capacitive ROLL-ON 56 mm
- EL0165 - Medium Resistive ROLL-ON 56 mm
- EL0113 - Capacitive ROLL-ON 80 mm
- EL0129 - Resistive ROLL-ON 80 mm
- EL0122 - Passive plate
- AC0665 - Elastic band, 60 cm
- AC0667 - Elastic band, 100 cm
- EL0148 - Dispenser with cap
- EL0128 - Ball cap
- EL0149 - Mini dispenser
- EL0125 - Passive plate lubrication cream 1000 ml
- EL0124 - ROLL-ON lubrication cream 500 ml

**HOW DOES THE ROLL-ON HANDPIECE WORK**

The special patented handpiece, known as the ROLL-ON, means that the



FOR THIS ITEM  
THERE ARE VIDEO

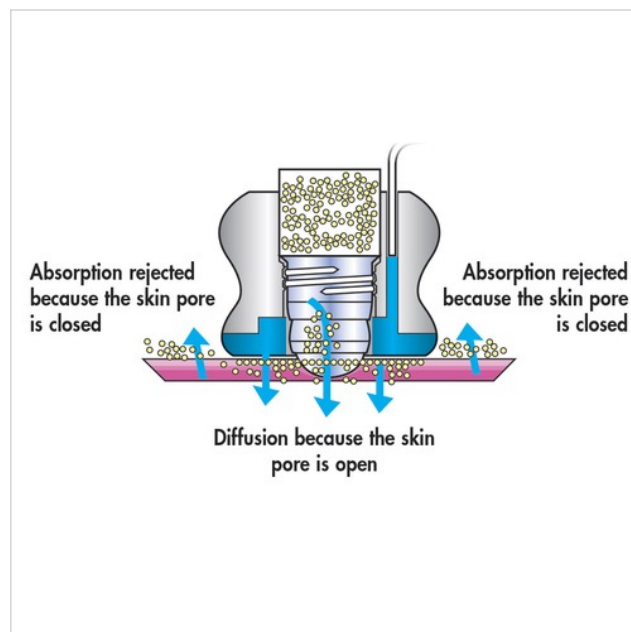
TCARE Cellular Regenerator device **guarantees the best geometric application for achieving capacitive-resistive energy transfers.** The particular shape of the handpiece provides an extensive contact area between the electrode and the patient's skin, while the ROLL-ON's functionality ensures that, unlike traditional handpieces, the correct quantity of cream is released at the contact interface on a real-time basis. This is sufficient to guarantee the development of the electro-chemical gradient, without allowing any dielectric arc to be formed. It also makes it possible to avoid wasteful dispersion of conductive cream, which provides significant savings in the operating costs sustained by professionals that use the device.



CE 0476

## Technical specifications and dimensions

Working frequency :	0,8MHz, 1 MHz, 1,2MHz
Output passive plate :	1
Manual output capacitive electrode :	1
Manual output direct coupling electrode :	1
Manual mode :	400Ω
V rms (aprox.):	320
Watt rms (aprox.):	150
Input voltage :	115÷230VAC ± 10% 50/60Hz
Maximum input power :	200 W
Ambient working temperature :	+10 ÷ +30 °C
Maximum temperature storage and transport :	+10 ÷ +70 °C
Maximum humidity storage and transport :	25 ÷ 85%
Passive plate area :	aprox. 220 cm <sup>2</sup>
Roll-On capacitive electrodes :	Ø 56 mm
Direct coupling electrodes :	Ø 56 mm
Active medical devices :	CLASS II B
Weight :	40 kg
Dimensions :	60 x 80 x 115 h cm



## Documentation available online

<b>Various</b> - Tcare clinical trial English	<a href="#">📄</a> .PDF 153.39 KB
<b>IFU</b> - Transfer capacitive resistive energy Italian	.PDF 3.51 MB
<b>IFU</b> - Transfer capacitive resistive energy English	.PDF 3.5 MB
<b>Various</b> - Studio clinico tcare Italian	.PDF 153.83 KB
<b>Certificate</b> - Ce certificate Italian, English	.PDF 1.64 MB
<b>Manual</b> - Manuale istruzioni Italian	<a href="#">📄</a> .PDF 847.25 KB
<b>Manual</b> - User and maintenance manual English	<a href="#">📄</a> .PDF 854.82 KB
<b>Compliance statement</b> - Declaration of conformity Italian, English	<a href="#">📄</a> .PDF 217.62 KB

[📄](#) The document is ready for download in reserved area.

## Accessories



### EL17230 TCARE CONDUCTIVE CREAM

It is a certified and clinically tested conductive cream for medical use with our TCare equipment in Tecar therapy treatments. It has a good consistency, glides and reacts well to the heating of the body part under treatment.



### EL0128 ROLL-ON BALL

Disposable ball caps for dispenser cod. EL0148. Package of 100 pieces.



### EL0148 DISPENSER WITH CAP

Dispenser with cap - 12 pieces, for 80mm handpieces. To be ordered with ball caps cod. EL0128.



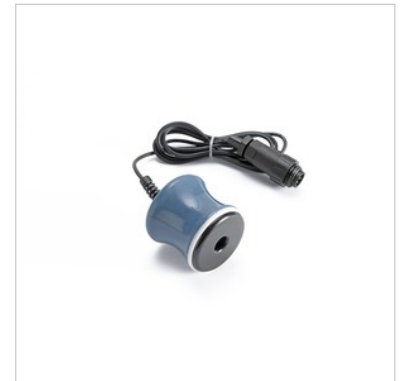
### EL0149 MINI DISPENSER

Disposable dispenser for 40mm and 56mm Roll-on hand pieces. Pack of 100 pieces.



### EL0113 LARGE CAPACITIVE ROLL-ON

Capacitive handpiece ROLL-ON. must be combined with dispenser cod. EL0148 and its ball caps cod. EL0128. Accessory product for Tcare device.



### EL0164 MEDIUM CAPACITIVE ROLL-ON

Medio capacitive Roll-On, 56 mm .To be combined with mini dispenser cod. EL0149. Accessory product for Tcare device.



**EL0147 MINI CAPACITIVE ROLL-ON**

Capacitive Mini hand piece Roll-On to treat small anatomic surfaces, 40 mm. To be combined with mini dispenser cod. EL0149. Accessory product for Tcare device.



**EL0129 LARGE RESISTIVE ROLL-ON**

Resistive handpiece ROLL-ON, 80 mm. must be combined with dispenser cod. EL0148 and its ball caps cod. EL0128. Accessory product for Tcare device.



**EL0165 MEDIUM RESISTIVE ROLL-ON**

Medio resistive Roll-On, 56 mm. To be combined with mini dispenser cod. EL0149. Accessory product for Tcare device.



**EL0163 MINI RESISTIVE ROLL-ON**

Resistive Mini hand piece Roll-On to treat small anatomic surfaces, 40 mm. To be combined with mini dispenser cod. EL0149. Accessory product for Tcare device.



**EL0122 PASSIVE PLATE**

Passive plate to be connected to the TCare device for Capacitive Resistive Energy Transfer therapy (C.R.E.T. therapy).



**EL0155 CAPACITIVE HANDPIECE**



**EL0116 LARGE CAPACITIVE ELECTRODE**  
Capacitive electrode 6,5 cm.



**EL0117 MEDIUM CAPACITIVE ELECTRODE**  
Capacitive electrode 5,3 cm.



**EL0118 MINI CAPACITIVE ELECTRODE**  
Capacitive electrode 3,3 cm.



**EL0156 RESISTIVE HANDPIECE**



**EL0119 LARGE RESISTIVE ELECTRODE**  
Resistive electrode 6,5 cm.



**EL0120 MEDIUM RESISTIVE ELECTRODE**  
Resistive electrode 5,3 cm.



**EL0121 MINI RESISTIVE ELECTRODE**  
Resistive electrode 3,3 cm.



**AC0667 ELASTIC BANDS 100X3 H CM**  
Elastic band, cm 100x3



**AC0665 ELASTIC BAND 60X3 H CM**  
Elastic band, cm 60x3

More pictures of product

