

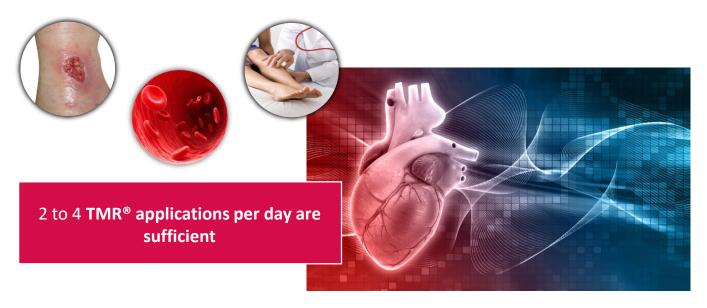
Medical device for clinical and home treatment of orthopedic vascular diseases and microcirculatory disorders.





#### **THERESON**

**THERESON** is an Italian biomedical company that for years has focused on clinical and scientific research with the aim of demonstrating efficacy in the treatment of vascular diseases and microcirculatory disorders using **TMR®** Therapeutic Magnetic Resonance, in particular in the presence of chronic systemic diseases such as diabetes.



## **Applications**

TMR® is indicated for the treatment of many vascular diseases, including:

- ✓ Degenerative Microcirculatory Disorders
- ✓ Diabetic Foot Lesions
- ✓ Acute and/or Chronic Skin Lesions
- ✓ Vascular, Arterial and Mixed Lesions
- ✓ Vasculitis and Phlebitis Lesions
- ✓ Post-Surgical Wounds
- ✓ Traumatic Injuries
- ✓ Complicated, Neuropathic and Pressure Ulcers
- ✓ Anti-aging
- ✓ Sexual Performance

### **Benefits**

- ✓ Ease of use.
- ✓ No direct contact with any skin lesions.
- ✓ Acts on pain.
- ✓ Complementary to other treatments.
- Can also be used where there is a plaster cast, plaster splint or brace.
- ✓ Outpatient and home therapy.

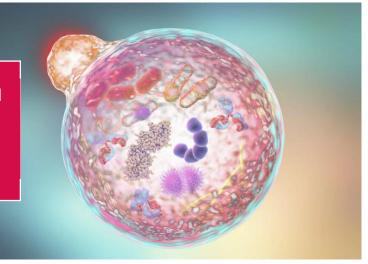


#### How it works

TMR® therapy consists of exposing patients to pulsed electromagnetic fields of specific shapes and frequencies, subject to international patent, in order to activate and accelerate cell and tissue repair processes.

The effectiveness of **TMR®** has been demonstrated through basic research, in vitro, in vivo, and finally confirmed by clinical trials in patients. It has, in particular, been shown to halve the healing time of many microcirculatory disorders and treatment is observed to be effective in the long term. The electricity supplied through **TMR®**, in fact, improves cell metabolism, restoring the physiological conditions compromised by the disease. Inflammation has also been shown to be reduced, resulting in lessened pain and improved cell replication mechanism.

TMR® is able to reduce free radicals and cellular oxidative stress, producing a statistically significant increase in fibroblasts.



#### TMR® technology is protected by several patents and is scientifically validated.

Through a long research trajectory, evidence was collected through in vitro and in vivo biology tests, two clinical trials in patients that allowed us to develop a biophysical model to understand how low frequency and low intensity pulsed fields of TMR® were effective in improving microcirculation and reducing inflammation and pain perception.

At the basis of **TMR**<sup>®</sup>, unlike other methods, therefore, is a biophysical model developed and published by **THERESON**that, together with biological and clinical evidence on the mode of interaction with biological tissue, explains the efficacy of **TMR**<sup>®</sup> in healing processes.

TMR® supports the restoration of physiological healing mechanisms and in particular in damaged tissue allows:

- ✓ a reduction in inflammatory components;
- ✓ a reduction in free radical production;
- ✓ increased proliferation of repair cells: matrix, vascularization, epidermis.



# A new, effective non-invasive therapy that can be performed by the patient on an outpatient basis or in the comfort of their own home.

TMR®, THERESON makes the benefits of Therapeutic Magnetic Resonance available in a compact, lightweight and extremely easy to use medical device.

The TMR® system is designed to be used directly by the patient at home, without the help of a medical professional. The sessions do not require special dressings or preparations, the patient does not need to undress or remove bandages, plaster casts or braces.

All the controls are clear and simple so that everyone can use them; no special training or familiarity with the technology is required. The data on therapies conducted using TMR® can be sent to physicians, thus allowing effective continuity of care to be maintained between healthcare professionals and patients across the region.

TMR® is the only instrument capable of acting on both the microcirculation repair process and the wound healing process.

