## **Combined Therapy**





## **ESWT**

**Extracorporeal Shock Wave Therapy for pain management** 

### **EMTT**

Extracorporeal Magnetotransduction Therapy for regeneration and rehabilitation of musculoskeletal disorders



## Combining Extracorporeal Shock Wave Therapy (ESWT) and Extracorporeal Magnetotransduction Therapy (EMTT)



Combining Extracorporeal Magnetotransduction Therapy (EMTT) and Extracorporeal Shock Wave Therapy (ESWT) offers various advantages in the treatment of different orthopaedic, musculoskeletal and chronic pain conditions. Both therapies are non-invasive. The main advantages of combining these two therapies are the following:

- Additive effect: EMTT and ESWT complement each other in their impact on tissue, accelerating and improving the pain and functional outcomes demonstrated on patients with rotator cuff tendinopathies. EMTT uses magnetic fields to stimulate anti-inflammatory and analgesic effects, while ESWT utilizes mechanical shock waves to promote blood circulation and metabolism in the affected tissues.
- Improved pain relief: The combination of EMTT and ESWT can provide stronger pain relief than ESWT alone. EMTT can reduce inflammation and pain, while ESWT promotes the release of pain-relieving substances, leading to better pain control.
- Fewer side effects: EMTT, as well as ESWT, is generally well tolerated and has a low risk of side effects.

- Shorter treatment duration: Since both forms of therapy are applied in a sequence at the same day, the treatment duration can be shortened. This is particularly advantageous for patients with limited mobility or those who wish to return to their daily activities more quickly.
- Applicability to various conditions: The combined therapy can be used for a variety of conditions, such as tendinitis, heel spur, tennis elbow and other musculoskeletal disorders.
- No medications or anaesthesia required: The combination of EMTT and ESWT typically does not require additional medications or anaesthesia, which reduces the risk of drug interactions or adverse side effects.

Overall, the combination of EMTT and ESWT can provide an effective, non-invasive, and well-tolerated therapy option for patients with various orthopaedic and musculoskeletal conditions. By combining the benefits of both forms of therapy, this combined treatment can lead to improved clinical outcomes and enhance the quality of life for patients.

## Fields of application for ESWT and EMTT



**R-SW handpiece** with extended pressure range and innovative function control display



F-SW handpiece with integrated, clear display for rapid treatment navigation and reduced handpiece revision costs by easy change of coil

### **Extracorporeal Shock Wave Therapy**

- Achillodynia
- Plantar fasciitis / heel spur
- Tibial stress syndrome
- Patellar tendinitis
- Trochanteric tendinopathy

- Calcific tendinitis
- Lateral / medial epicondylitis
- Trigger points
- Pseudarthrosis
- Wound healing



**EMTTapplicator** High-frequency magnetic field ( $100-300\ kHz$ ), continuous and reliable operation by water-cooled applicator

# **Extracorporeal Magnetotransduction Therapy**

- Musculoskeletal disorders
- Back pain
- Osteoarthritis
- Sports injuries such as inflammation of the tendons and joints

#### **DUOLITH® SD1 TOWER »ultra«**



- Combined shock wave therapy with 15.6" touch screen (F-SW & R-SW)
- Functional parameters (radial and focused shock wave) see MASTERPULS® MP200 »ultra« and DUOLITH® SD1 T-TOP »ultra«
- Built-in ultrasound imaging with colour Doppler (optional)
- Drawer module »Store Case« (optional)
- Available in green, blue, orange and black



#### **DUOLITH® SD1 T-TOP »ultra«**



- Focused shock wave (F-SW): standard energy range: 0.01 - 0.55 mJ/mm<sup>2</sup>
- Focused shock wave (F-SW): extended energy range: 0.03 - 1.24 mJ/mm<sup>2</sup>
- SEPIA® focused handpiece with built-in buttons and display
- 10" touch screen (optional)
- Available in green, blue, orange and black



#### **MAGNETOLITH®**



- Extracorporeal Magnetotransduction Therapy (EMTT®) for regeneration and rehabilitation of musculoskeletal disorders
- Wide range of therapeutic applications
- The patient does not have to undress
- High-frequency magnetic field (100 300 kHz)
- Click & Connect-Mechanism for a flexible applicator positioning
- Integrated touch display to adjust energy level, frequency & pulse rate

#### MASTERPULS® MP200 »ultra«



- Radial shock wave (R-SW): pressure:  $0.3 - 5.0 \text{ bar}_{eff}$ frequency: 1 – 21 Hz
- FALCON® radial handpiece with built-in buttons and display
- Two R-SW connectors
- Vibration therapy (optional), V-ACTOR® »HF«: 1 – 50 Hz
- Vacuum therapy, VACU-ACTOR® technology
- 10" touch screen
- Available in green, blue, orange and black

#### MASTERPULS® MP50 & MP100 »ultra«



- Radial shock wave (R-SW): pressure:  $0.3 - 5.0 \text{ bar}_{eff}$  (MP50:  $0.3 - 4.0 \text{ bar}_{eff}$ ) frequency: 1 – 21 Hz (MP50: 1 – 17 Hz) (depending on pressure)
- FALCON® radial handpiece with built-in buttons and display
- Vibration therapy (optional), V-ACTOR® »HF«: 1 – 50 Hz (MP50: 1 – 21 Hz)
- 10" touch screen (optional)
- Available in green, blue, orange and black

#### **MASTERPULS® ONE**



- Radial shock wave (R-SW): 6 intensity levels:  $6 - 18 \, \text{Hz} / \text{max}$ . 2.7  $\text{bar}_{\text{eff}}$
- Intuitive operation via built-in touch screen
- SPARROW® radial handpiece:
- Minimal vibrations for minimal hand fatigue
- Built-in snap-in connection for fast and easy handpiece replacement
- Available in grey, green and orange







