

# GUIDED DOLORCLAST<sup>®</sup> THERAPY

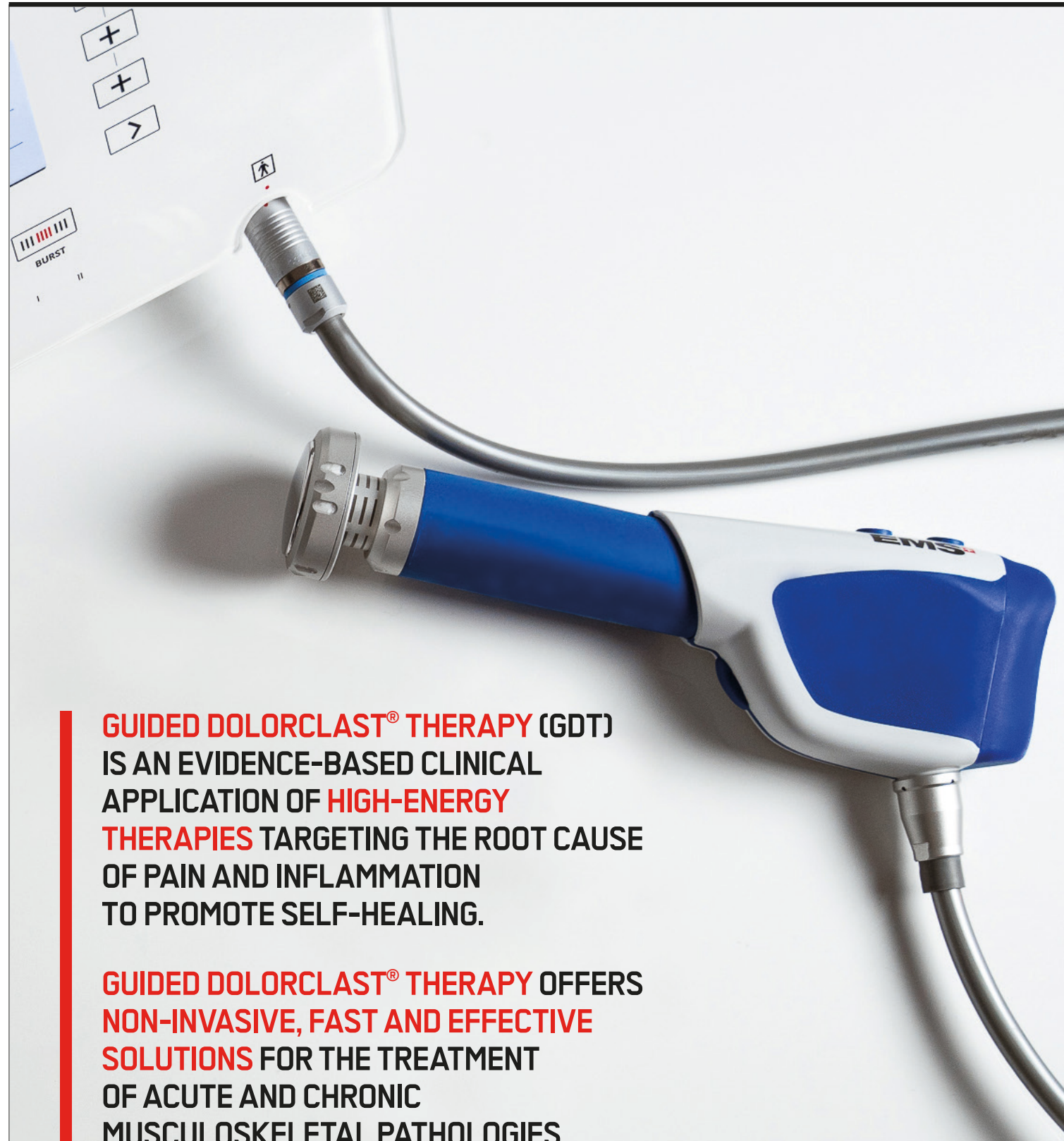
EVIDENCE-BASED HIGH-ENERGY THERAPIES  
FROM THE INVENTORS OF RADIAL SHOCK WAVES THERAPY



DOLORCLAST<sup>®</sup>  
**MAX**  
POWER

**EMS** 





**GUIDED DOLORCLAST® THERAPY (GDT)** IS AN EVIDENCE-BASED CLINICAL APPLICATION OF **HIGH-ENERGY THERAPIES** TARGETING THE ROOT CAUSE OF PAIN AND INFLAMMATION TO PROMOTE SELF-HEALING.

**GUIDED DOLORCLAST® THERAPY** OFFERS **NON-INVASIVE, FAST AND EFFECTIVE SOLUTIONS** FOR THE TREATMENT OF ACUTE AND CHRONIC MUSCULOSKELETAL PATHOLOGIES.

**THERAPISTS TRUST GDT**  
**PATIENTS LOVE GDT**

## YOUR FIRST-LINE THERAPY

### TOP-NOTCH HIGH-ENERGY THERAPIES

- ▶ DolorClast® Radial Shock Waves / Focused Shock Waves / High Power Laser
- ▶ Clinically proven with multiple Randomized Control Trials (RCTs)
- ▶ High rate of successful treatment outcomes

### UNLOCKING NATURAL HEALING

- ▶ Treats acute and chronic inflammation
- ▶ Relieves pain
- ▶ Fosters regeneration

### NON-INVASIVE PROCEDURES

- ▶ No surgery = no downtime
- ▶ No injections = no complication
- ▶ No pain medication = no risks of drug-related adverse effects

### MAKING YOUR PATIENT SMILE

- ▶ GDT Compass supports patient-centered approach
- ▶ Low number of treatments for high compliance
- ▶ Fast effects from 1<sup>st</sup> session

### TRAINING - SHARING - PRACTICING

- ▶ Worldwide expert-led training courses
- ▶ Collaborative learning community of users
- ▶ Certification program to increase practice exposure

**PAVING THE WAY TO REHABILITATION**  
**AND SUSTAINABLE RECOVERY**



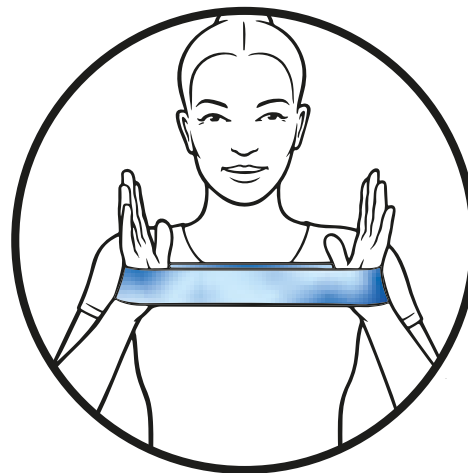


## 01 ASSESS

ASSESS YOUR PATIENT'S PATHOLOGY  
WITH KEY QUESTIONS & TESTS

## 04 REHABILITATE

REHABILITATE WITH COMPLEMENTARY EXERCISES  
TO INCREASE FUNCTION AND SUSTAINABLE RECOVERY



## 02 ENGAGE

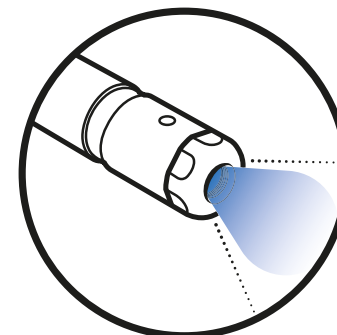
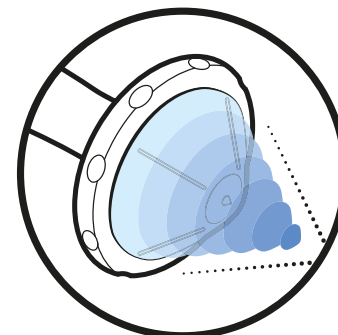
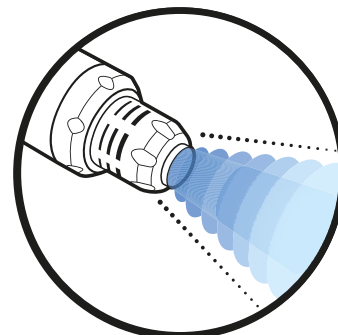
OFFER YOUR PATIENTS A HIGH-ENERGY,  
EFFICIENT AND DRUG-FREE SOLUTION TO:

- ▶ RELIEVE PAIN
- ▶ TREAT INFLAMMATION
- ▶ STIMULATE NATURAL HEALING

## 03 TREAT

CHOOSE THE APPROPRIATE HIGH ENERGY DOLORCLAST® THERAPY  
TO TREAT YOUR PATIENT'S PATHOLOGY

- ▶ DOLORCLAST® RADIAL SHOCK WAVES
- ▶ DOLORCLAST® FOCUSED SHOCK WAVES
- ▶ DOLORCLAST® HIGH POWER LASER





# UNLOCK YOUR HEALING POTENTIAL



Natural healing is blocked by biological interactions between pain and inflammation mechanisms.

GDT quickly and efficiently treats pain and inflammation, whether acute or chronic. It unlocks the body's ability to repair itself while activating specific healing mechanisms.

**GDT gets patients moving and leads them to recovery within a few weeks.**

## RELIEVE PAIN

- ▶ Overwhelms C nerve fibers to inhibit the release of Substance P, which is responsible for increasing pain signals.<sup>1-2</sup>
- ▶ Inhibits sensory neurons located at nerve endings to suppress pain signals to the central nervous system.<sup>3</sup>
- ▶ **Analgesic effect kicks in right from the 1<sup>st</sup> treatment.**

## TREAT INFLAMMATION

- ▶ Reduces the release of Substance P, thus inhibiting neurogenic inflammation and allowing scleraxis expression.<sup>1-2</sup>
- ▶ Decreases the amount of Prostaglandin E<sub>2</sub> (PGE<sub>2</sub>) responsible for mediating acute inflammation<sup>4</sup>, mimicking the effects of non-steroidal anti-inflammatory drugs (NSAIDs) without side effects.
- ▶ **Induces an anti-inflammatory action, paving the way to healing.**

## STIMULATE NATURAL HEALING

- ▶ Improves angiogenesis, blood circulation and pressure.<sup>5-6-7-8-9-10-11</sup>
- ▶ Activates the repair of damaged muscle fibers.<sup>12-13</sup>
- ▶ Stimulates tendon remodeling and helps decrease erosive wear.<sup>14-15</sup>
- ▶ Decreases cartilage degradation and stimulates its repair.<sup>16</sup>
- ▶ Stimulates bone healing.<sup>17-18-19-20-21</sup>
- ▶ **Fosters regeneration of muscles, tendons, cartilage and bone.**



# MOVE, FEEL AND LIVE

# BETTER



“After a few sessions,  
I was in less pain  
and could continue  
competing.”

## PATIENT TESTIMONIAL

"I was lucky enough to be treated with DolorClast® for supraspinatus tendonitis a few years ago. After a few sessions, the pain disappeared and I was able to continue my competitive season in speed kitesurfing with peace of mind. I remember how happy I was after just a few sessions! I could hold my kitesurfing bar again and, above all, pull it towards me to accelerate! Thanks again to this superb technology!"

**MARIE DESANDRE NAVARRE**

Professional kitesurfer, France, 2020 (in picture)

## GUIDED DOLORCLAST® THERAPY

ADDRESSES MULTIPLE MUSCULOSKELETAL,  
NEUROLOGICAL AND VASCULAR APPLICATIONS.

IS YOUR PATIENT SUFFERING FROM ONE OF THESE CONDITIONS?

- ▶ BACK PAIN
- ▶ TENDINOPATHY
- ▶ OSTEOARTHRITIS
- ▶ ENTHESOPATHY
- ▶ FASCIOPATHY
- ▶ MYOFASCIAL PAIN SYNDROME
- ▶ CALCIFICATION
- ▶ DELAYED UNION AND NON-UNION FRACTURE
- ▶ SPASTICITY
- ▶ ERECTILE DYSFUNCTION

OFFER YOUR PATIENTS A SOLUTION  
WITH **GUIDED DOLORCLAST® THERAPY**



# GDT MAKES YOU SMILE



## PRACTITIONER TESTIMONIAL



"EMS deserves my respect for promoting a combination of therapeutic modalities to address musculoskeletal pathologies, which includes the use of their equipment. In my 38 years of experience in healthcare, I can confidently say that DolorClast® Radial Shock Waves is the best-designed EMS equipment I've ever encountered."

**STEVE BLOOR**

Podiatrist at Cornwall Podiatry, United Kingdom, 2023

“Best-designed EMS equipment.”



## GDT BENEFITS YOUR PATIENTS

1. CLINICALLY- PROVEN THERAPIES
2. NON-INVASIVE ALTERNATIVE TO INJECTIONS AND SURGERY
3. AVOIDS DRUG-RELATED SIDE-EFFECTS
4. NO DOWN-TIME
5. EFFECTS FROM 1<sup>ST</sup> TREATMENT
6. LONG-LASTING HEALING BENEFITS

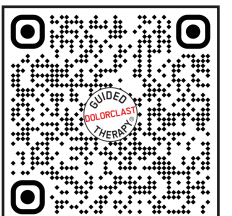
## HAPPY PATIENTS

## GDT BENEFITS YOUR PRACTICE

1. EVIDENCE-BASED THERAPIES
2. HIGH SUCCESS RATE
3. WIDE PATIENT GROUPS
4. FAST RETURN ON INVESTMENT
5. RELIABLE SWISS QUALITY
6. LOW MAINTENANCE
7. CONTINUOUS EDUCATION WITH SWISS DOLORCLAST® ACADEMY

## HAPPY PRACTITIONERS

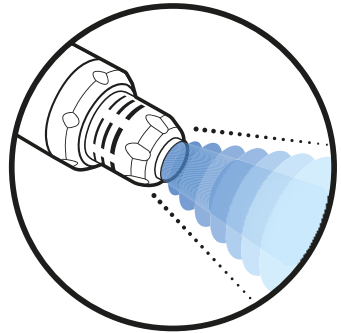
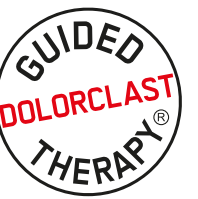
READ MORE  
TESTIMONIALS



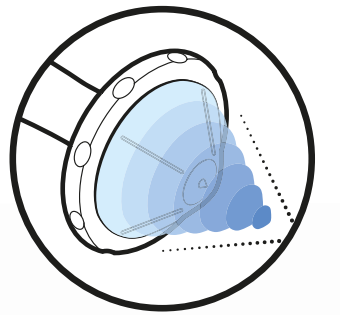


# DOLORCLAST® SHOCK

# WAVES THERAPY



**DOLORCLAST®**  
**RADIAL SHOCK WAVES**



**DOLORCLAST®**  
**FOCUSED SHOCK WAVES**



# 1

## HIGH ENERGY PER SHOCK IS ESSENTIAL

► Recent clinical studies demonstrate that a high amount of energy per single shock wave is a prerequisite for treatment efficiency.<sup>22</sup>

► Even more importantly, delivering more shocks does not compensate for low energy per shock in terms of treatment efficiency.<sup>22</sup>

# 2

## CAVITATION IS KEY FOR SUCCESS

► Cavitation plays a major role in the success of extracorporeal shock wave therapy.<sup>23</sup> In the absence of cavitation, some key biological responses simply do not occur in the treated tissues.<sup>13-23</sup>

► The effectiveness of shock waves therapy correlates with the levels of cavitation generated by a shock wave device.<sup>23</sup>

# 3

## HIGH ENERGY OUTPUT FOR MORE CAVITATION

► The shock wave's initial compression phase increases with the energy delivered to the tissue. Similarly, in the decompression phase, more energy will create more cavitation bubbles.

► The greater the energy input, the greater the pressure in the tissues, the greater the level of cavitation<sup>23</sup> and, in turn, the physiological responses.

# 4

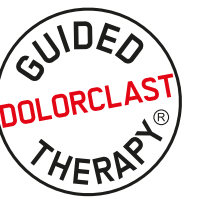
## HIGH ENERGY RADIAL OR FOCUSED

► *“A wave is a wave” regardless of whether it is generated with a focused device or radial device. Much more important is whether sufficient energy is achieved where it is needed in the body.*<sup>24</sup>

► Radial or focused shock waves? One is not superior to the other.<sup>24</sup> The choice of the right type of shock waves is determined by the pathology type and localization, as well as the patient's history and response.



# EFFICACY ROOTED IN SCIENCE AND HIGH TECHNOLOGY

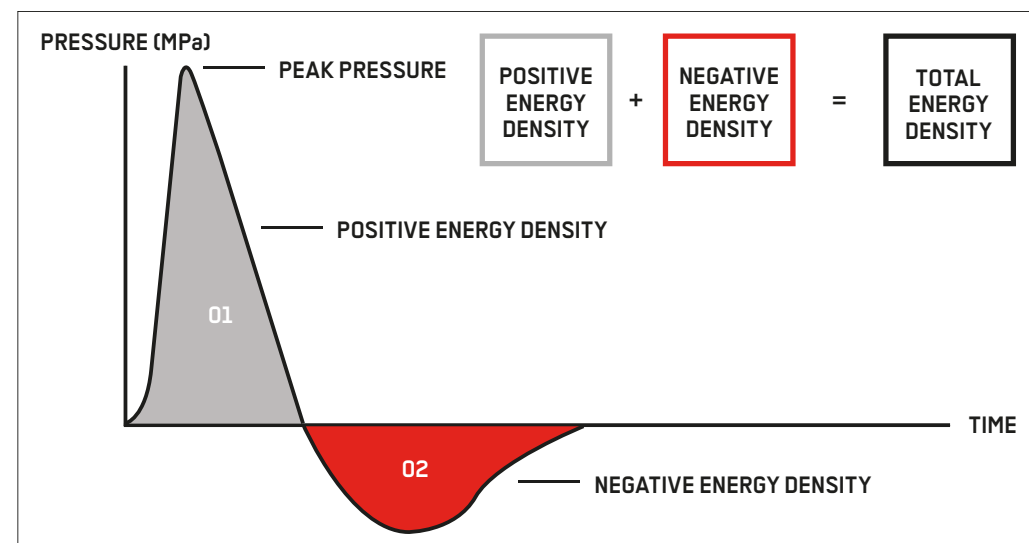


## ENERGY TRANSMISSION AND RESTITUTION

Extracorporeal shock waves are acoustic waves with specific characteristics such as high pressure peak, short rise time and duration, and low tensile amplitude.

A shock wave consists of two phases:

- 01 Primary compression phase building up pressure and causing shear stress in the tissues.
- 02 Negative pressure phase releasing the energy, thus generating cavitation bubbles.



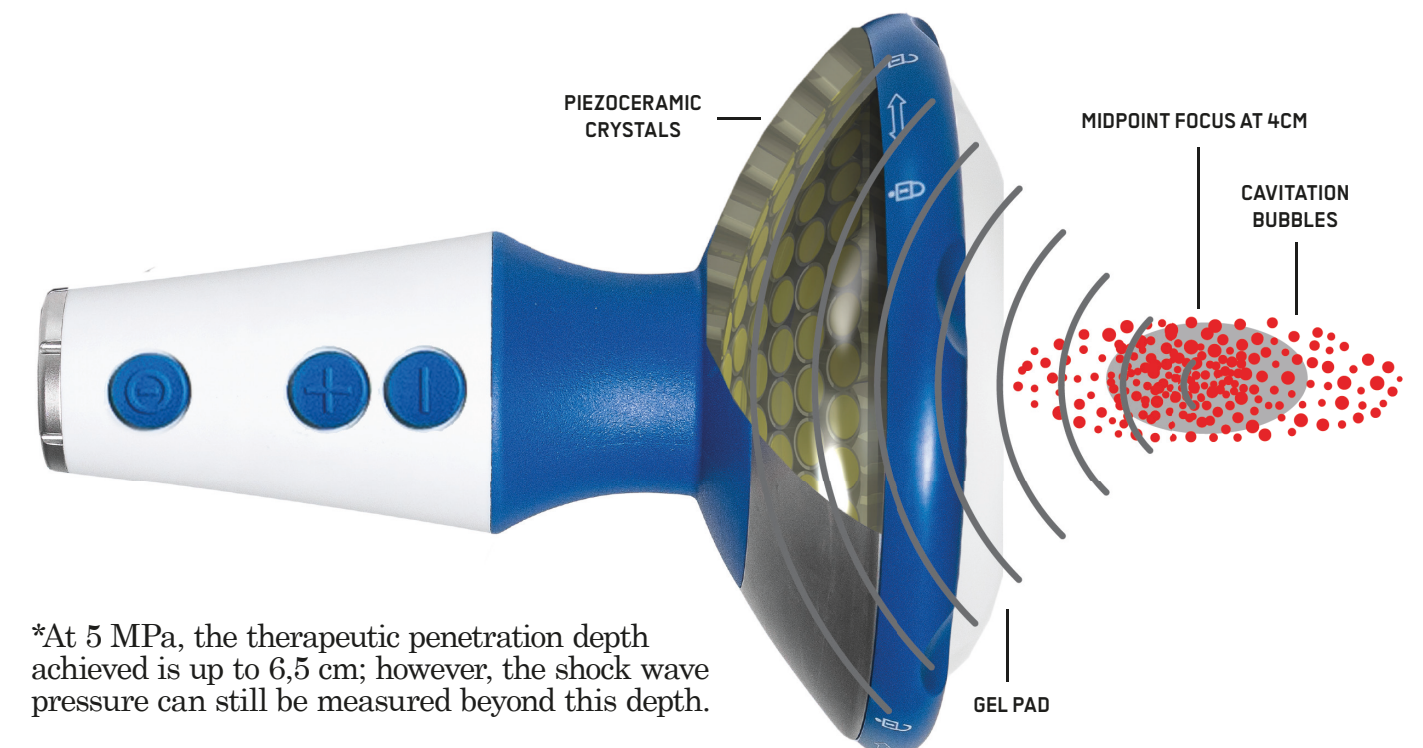
## HIGH ENERGY IS KEY TO SUCCESS

## HIGH PRECISION TECHNOLOGIES SHAPE TRUE HIGH ENERGY SHOCK WAVES



**DOLORCLAST® RADIAL SHOCK WAVES**  
BALLISTIC TECHNOLOGY

**DOLORCLAST® FOCUSED SHOCK WAVES**  
PIEZOELECTRIC TECHNOLOGY

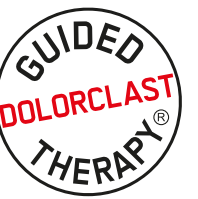


\*At 5 MPa, the therapeutic penetration depth achieved is up to 6,5 cm; however, the shock wave pressure can still be measured beyond this depth.



# MASTER THE ENERGY

# AND SET THE GAME

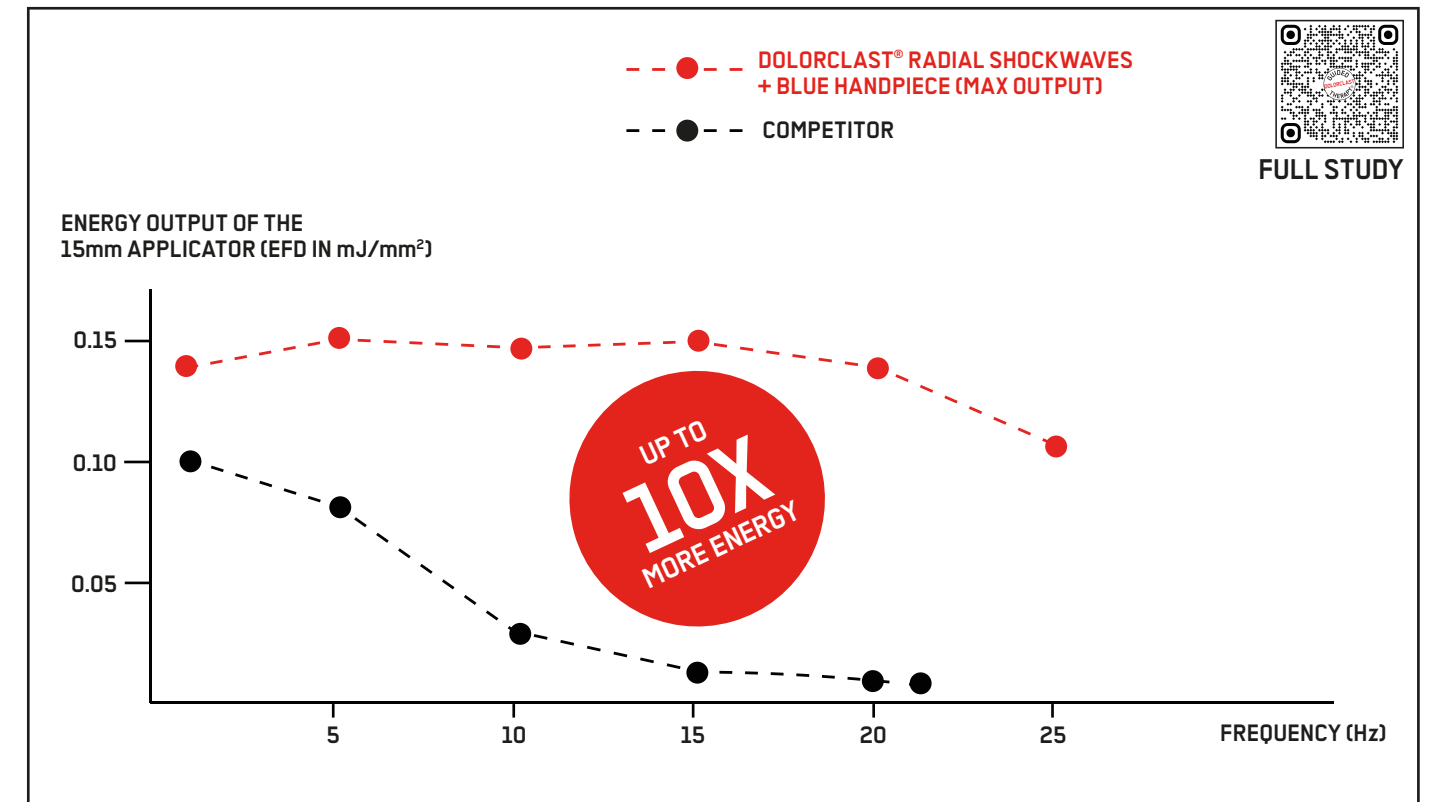


**HIGHEST ENERGY – HIGHEST EFFICIENCY**  
**CLINICAL OUTCOMES ACHIEVED WITH**  
**DOLORCLAST® DEVICES MAY NOT BE ACHIEVED**  
**WITH DEVICES WITH SIGNIFICANTLY LOWER**  
**ENERGY OUTPUT**

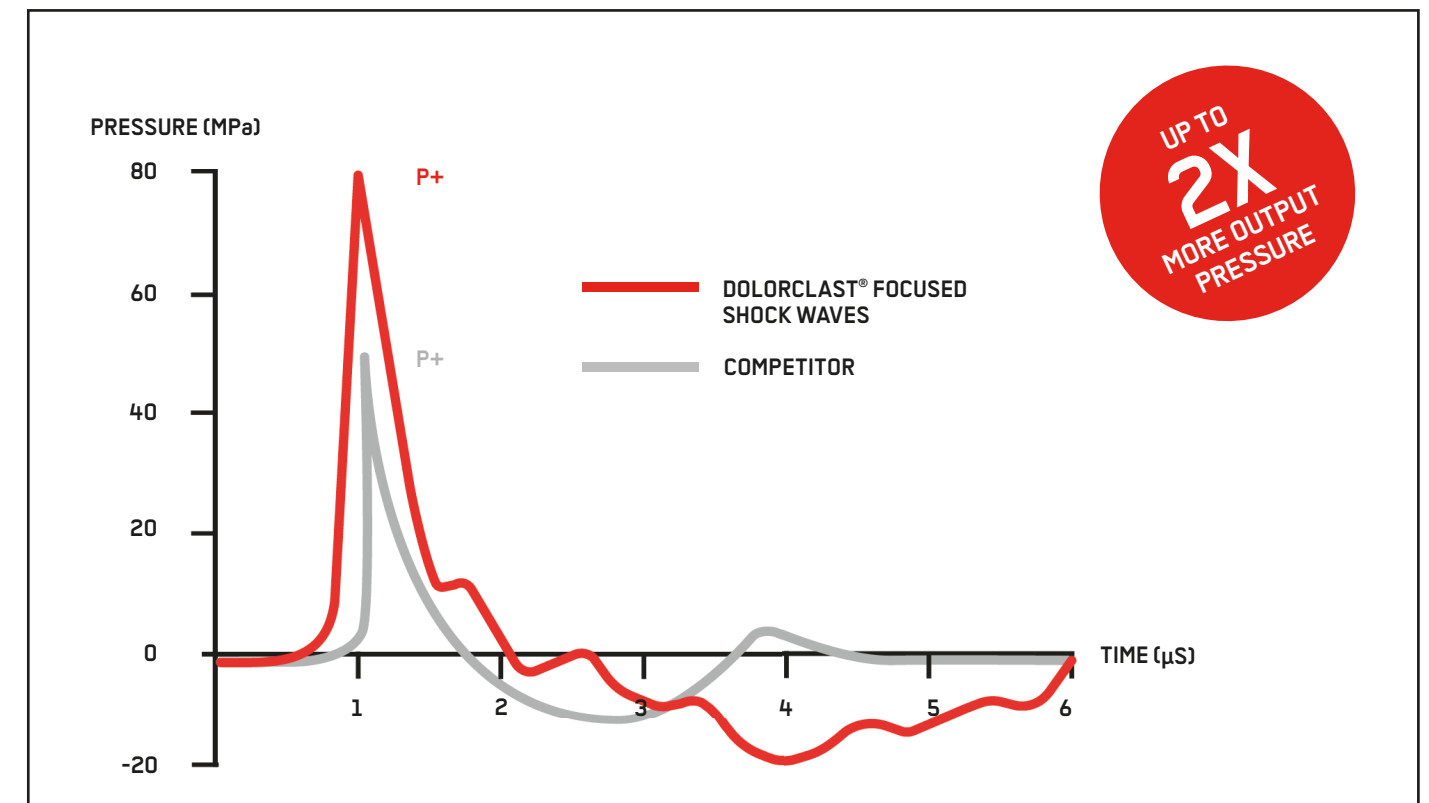
**85%** OF ALL LEVEL 1 CLINICAL TRIALS\*  
 WITH ENERGY DENSITY  
 $> 0.1 \text{mJ/mm}^2$  PUBLISHED  
 IN THE PEDro DATABASE ARE PERFORMED  
 WITH A DOLORCLAST® DEVICE.<sup>25</sup>

**80%** OF PUBLISHED STUDIES\* PERFORMED  
 WITH A DOLORCLAST® DEVICE  
 DEMONSTRATED A POSITIVE  
 PATIENT OUTCOME IN ONLY 3 SESSIONS.<sup>25</sup>

**60%** OF ALL STUDIES\* DEMONSTRATING  
 CELLULAR AND BIOLOGICAL  
 EFFECTS ARE PERFORMED  
 WITH A DOLORCLAST® DEVICE.<sup>24</sup>



Comparison of energy output at all frequencies. Source of extracted measurements.<sup>26</sup>



Acoustic characterization of the DolorClast® Focused Shock Waves.  
 Internal measurements.

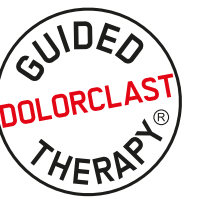
\* Using radial shock waves.

**FEEL THE ENERGY !**

**CALL YOUR GDT EXPERT AND BOOK A DEMO**



# PAIN-FREE ACTIVITIES



“It has literally been a game-changer for me.”



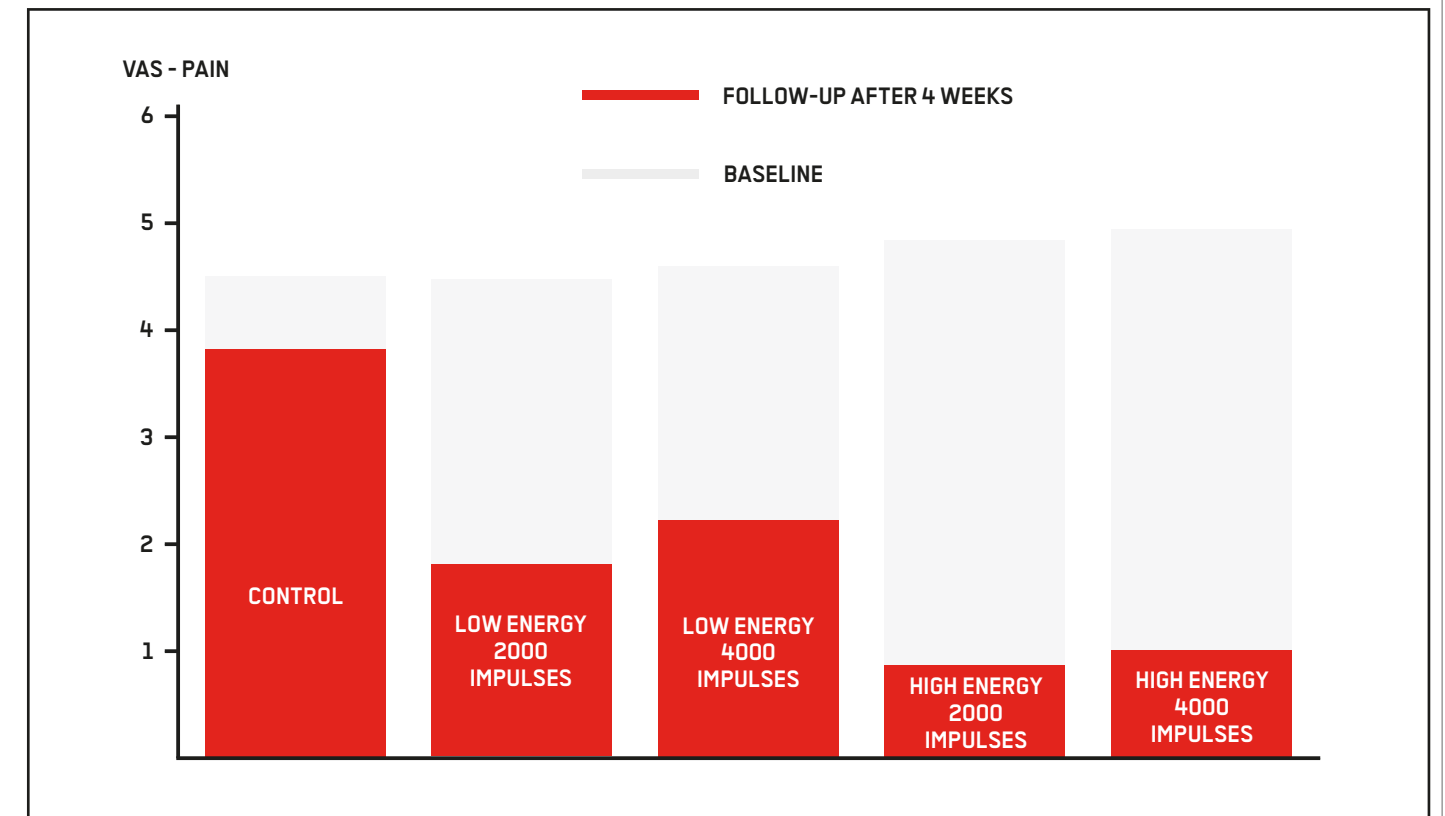
## PATIENT TESTIMONIAL

"As a dental hygienist, I'm always on my feet. For the last 7 years, I've suffered severe pain in my left foot. Even walking on the beach, I get shooting pain up my leg. As a result, I haven't been able to wear any high heels without being in pain for hours afterwards. After just one Dolorclast® Shock Waves Treatment, I was in less pain. In only 7 minutes! It has literally been a game changer for me, I can't believe how quickly it worked. I now recommend all my friends suffering back, neck, shoulder, knee or with any muscle issue seek out EMS DolorClast® shockwave therapy. It really works."

**TABITHA**

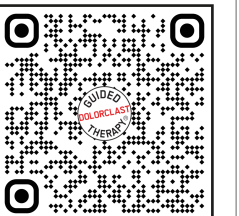
Dental Hygienist - Newcastle, Australia , 2023

## SUPERIOR TREATMENT OUTCOMES OF HIGH-ENERGY DOLORCLAST® SHOCK WAVES THERAPY.



### Importance of high energy over number of shocks for pain reduction in knee osteoarthritis.<sup>27</sup>

- This study on knee osteoarthritis proved superior pain relief with high energy shock waves over low energy shock waves. High energy shock waves are more efficient for improving patients' conditions.
- A low energy shock wave does not provide the same treatment outcome as a high energy shock wave.
- Low energy cannot be compensated for by applying more shocks.



FULL STUDY



“It enabled me to stay fit until the end of the season.”



## PATIENT TESTIMONIAL

"I was struggling with plantar fasciitis in the middle of last season and I thought my rugby season may be cut short, or a rest period may be required. Fortunately, our clinic uses Shock Wave Therapy for this exact issue and after a few treatments, the pain started to ease and eventually disappeared completely. It enabled me to stay fit until the end of the season despite a very busy period."

**JAMIE GEORGE**

Rugby Player, Saracens London, 2023

## DOLORCLAST® SHOCK WAVE THERAPY REDUCES LAY-OFF TIMES IN ELITE SPORTS AND RE-INJURY RATES

- ▶ When compared to conventional treatments, shock waves prove to be beneficial in reducing duration of activity interruption in professional sports.<sup>28</sup>
- ▶ Average duration of activity interruption (lay-off time) in Type 1a (muscular tightness / hypertonicity) and 2b (muscular strain injury) muscle injuries was 50% shorter than comparable cases reported in literature.<sup>28</sup>
- ▶ High frequency radial shock wave treatments enable fast treatments on large regions of the body without compromising the energy delivery to the treated tissues.

### LAY-OFF TIME REDUCTION WITH DOLORCLAST® SHOCK WAVES

REDUCED  
by 54%

REDUCED  
by 50%

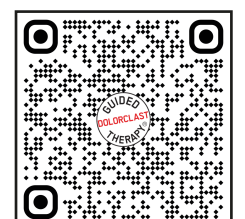
REDUCED  
by 23%

Type 1A  
INJURIES

Type 2B  
INJURIES

Type 3B  
INJURIES

Return to play after treating acute muscle injuries in elite football players with radial extracorporeal shock wave therapy.<sup>28</sup>



FULL STUDY





## NO MAGIC TRICKS – JUST TECHNICAL FEATS

### MAXIMUM ENERGY OUTPUT

### FOR FAST RECOVERY

#### 1. OUTSTANDING RADIAL SHOCK WAVE TECHNOLOGY – RIVALLING COMPETING FOCUSED PRESSURE WAVE UNITS

- ▶ Patented air management system allows for efficient conversion of airflow input to constant high energy output at all frequencies.
- ▶ High performing integrated compressors solution reduces unit's weight (15kg) and enables treatment anywhere at any time.

#### 2. OPTIMAL ENERGY DELIVERY – ENHANCED RECOVERY

Specific protocols and treatment modes increase patient's tolerability and compliance to shock wave therapy:

- ▶ SMART preset protocols increase treatment efficiency.
- ▶ ANALGESIC mode with high-frequency settings builds up tolerability to treatment for sensitive patients.
- ▶ RAMP-UP mode with gradual increase of energy settings to maximum output ensures best clinical outcomes.
- ▶ BURST mode with alternating frequencies prevents patients from acquired tolerance to mechanical stimulation.

#### 3. FAST AND EFFICIENT TREATMENT

- ▶ Offer patients short efficient shock waves sessions with the 25Hz frequency (1500 high-energy shocks/ min).
- ▶ Adjust energy while treating directly from the handpiece.
- ▶ Swap applicators instantly with the quick-release system.





## HIGH ENERGY LEVELS AND DEEPER PENETRATION TO COVER A WIDER RANGE OF PATHOLOGIES

### 1. SAVE TIME TO FOCUS ON THE ESSENTIALS

- ▶ Intuitive touch-screen interface for seamless navigation.
- ▶ Integrated step-by-step treatment tutorial.
- ▶ Preset protocols for easy guidance.
- ▶ Real-time monitoring of key parameters.
- ▶ Fully customizable protocols.
- ▶ 2 special modes (Analgesic and Ramp-up) to increase efficiency, tolerability and compliance.

### 2. IMPROVE PATIENT EXPERIENCE AND CLINICAL OUTCOMES

- ▶ Key function directly activated on the handpiece for streamlined operation (intensity and on/off buttons).
- ▶ Piezoelectric generation of shock wave avoids mechanical micro displacement of handpiece's applicator, thus providing comfortable treatment even for highly sensitive patients.
- ▶ 3 gel pads to adjust the depth of the focus point based on the pathology.

### 3. EASE YOUR PRACTICE WORKFLOW

- ▶ Treat anywhere anytime with transportable plug-and-play device.
- ▶ Maintenance-free.
- ▶ Long handpiece lifespan of over 5 million impulses.



## PATHOLOGY DEPTH AND REQUIRED ENERGY GUIDE THE THERAPEUTIC CHOICE



### DOLORCLAST® RADIAL SHOCK WAVES

#### Indication depth:

- ▶ Shallow pathologies (0-4 cm)

#### Maximum energy output:

- ▶ 0.28 mJ/mm<sup>2</sup> delivered at the tip of the applicator

#### Ideal for:

- ▶ Superficial tendinopathies
- ▶ Fasciopathies
- ▶ Myofascial pain syndromes
- ▶ Large muscular areas
- ▶ Spasticity



### DOLORCLAST® FOCUSED SHOCK WAVES

#### Indication depth:

- ▶ Deep pathologies (0-6.5 cm)

#### Maximum energy output:

- ▶ 0.55 mJ/mm<sup>2</sup> delivered at the focus point, approximately 4 cm below the skin

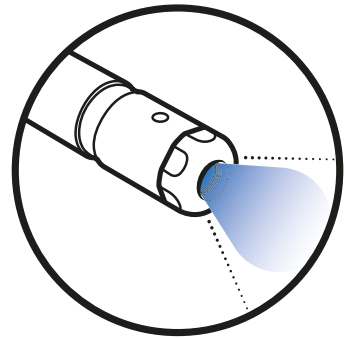
#### Ideal for:

- ▶ Deep structural pathologies
- ▶ Calcifications
- ▶ Bone lesions
- ▶ Pseudarthrosis
- ▶ Deep trigger points
- ▶ Painful enthesopathies





# DOLORCLAST® HIGH POWER LASER THERAPY



DOLORCLAST®  
HIGH POWER LASER



# 4 PILLARS OF SUCCESSFUL GDT LASER THERAPY



# 1

## **CORRECT WAVELENGTH FOR BEST TRANSMITTANCE**

► To treat musculoskeletal conditions, the wavelength must be able to pass through the skin barrier and transmit the highest energy to subcutaneous tissues. The best wavelength is therefore the one least absorbed by unwanted molecules present in the skin, such as melanin, water and blood.

# 2

## **HIGH POWER FOR DEEP ENERGY DELIVERY**

► 90% of laser energy is typically absorbed within the first 10 mm of tissue<sup>29</sup>. As musculoskeletal pathologies lie beneath the skin, a high peak power is required to deliver therapeutically efficient energy to subcutaneous tissues.

# 3

## **SUPERPULSED EMISSION FOR THERMAL PROTECTION**

► Pulse durations over 200ns lead to thermal increase in treated tissues<sup>30</sup>, which may turn into unwanted irreversible protein damage. Real superpulsed emission is characterized by high energy short pulses emitted at an interval allowing thermal relaxation. It enables high energy transfer without thermal increase.

# 4

## **UNIFORM BEAM FOR OPTIMIZED DISTRIBUTION**

► A laser beam must be uniform to allow homogeneous distribution of the energy to the treated tissues and keep them safe from thermal damage. A top-hat distribution profile is ideal to ensure correct dosing of the energy<sup>29</sup>.

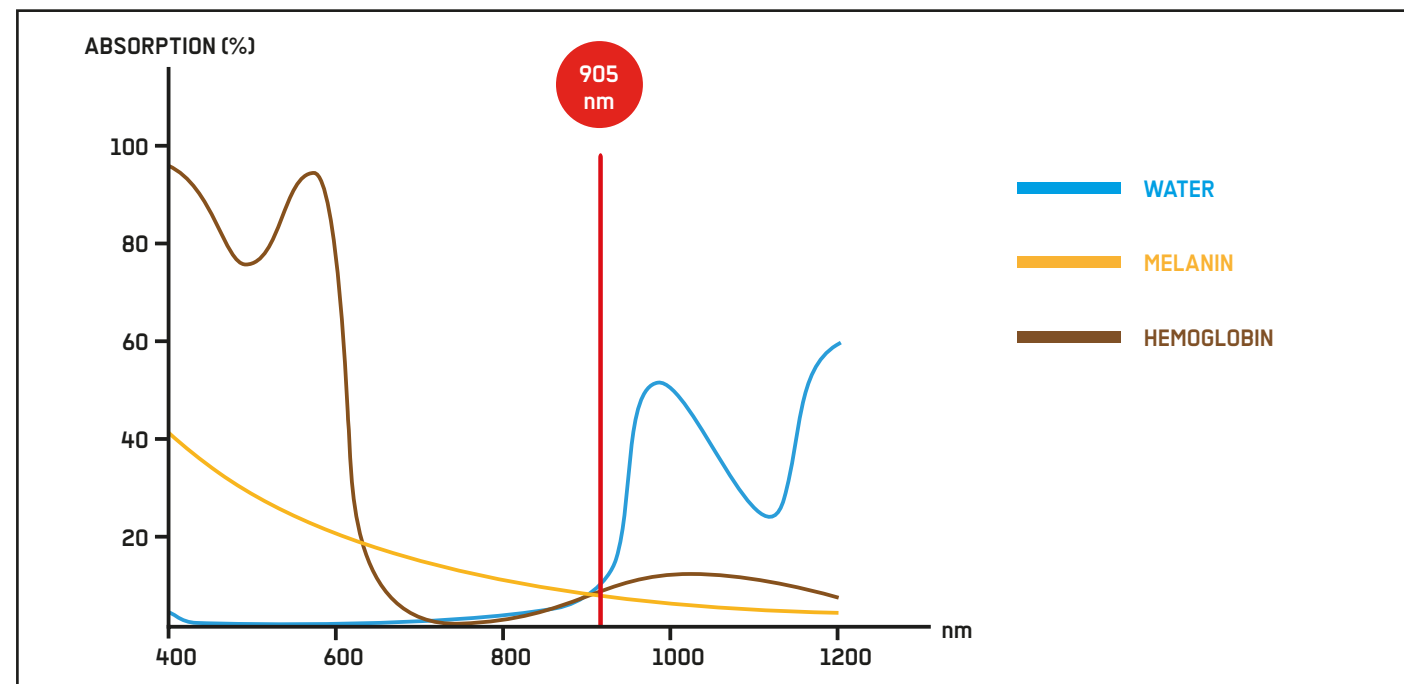


# OPTIMAL SETTINGS FOR

# PEAK RESULTS

## 905NM WAVELENGTH MAXIMUM TRANSMITTANCE

- Clinical research<sup>29-31</sup> demonstrates that, within the therapeutic window of near infrared light, 905nm wavelength is the least absorbed by chromophores and offers the best overall transmittance of energy to targeted tissues.



## MAXIMUM EFFECTS

### REDUCTION OF PAIN TRANSMISSION IN JUST 3 MIN

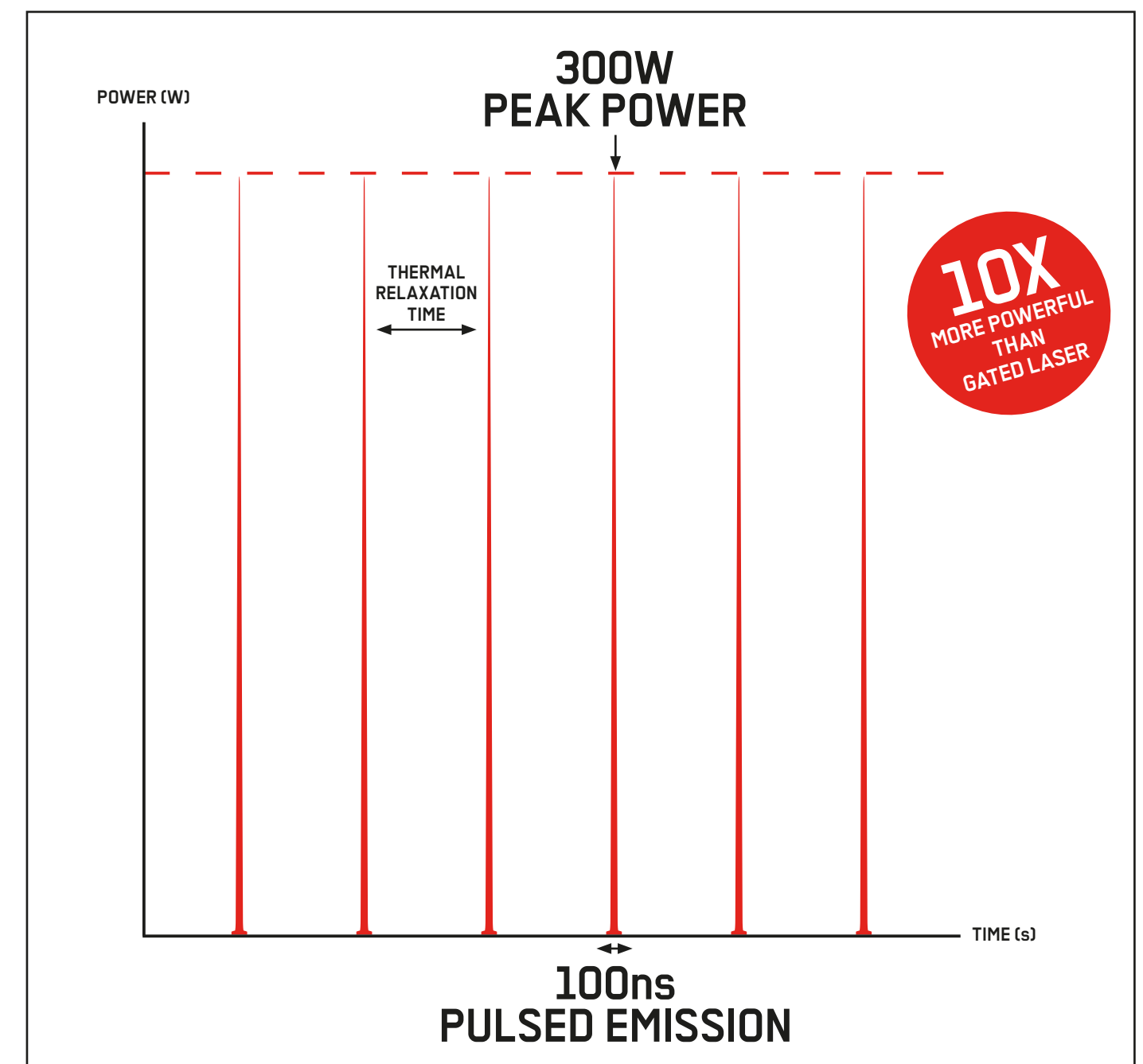
- 905nm laser light has been demonstrated to switch off nociceptors responsible for the transmission of pain after only 3 minutes of application<sup>3</sup>. 905nm wavelength provides quick pain relief without resorting to any pain medication.

### REDUCTION OF ACUTE INFLAMMATION IN 1 HOUR

- Clinical research<sup>4</sup> shows that exposing tissues to 905nm wavelength diminishes the level of concentration of Prostaglandin E<sub>2</sub> (PGE<sub>2</sub>) in 1 hour. This leads to the reduction of acute inflammation in treated tissues. By mimicking the effect of nonsteroidal anti-inflammatory drugs (NSAIDs), without exposing patients to their side-effects, DolorClast® High Power Laser facilitates the healing process.

## 300W PEAK POWER MAXIMUM ACTIVATION BELOW THE SKIN

- High peak power of 300W maximizes the laser energy delivery in subcutaneous tissues. This allows efficient targeting of musculoskeletal conditions.
- More energy is delivered in less time. This allows therapeutic dosage to be achieved more quickly.





# TREAT - DON'T HEAT



## 100 NS SHORT PULSES

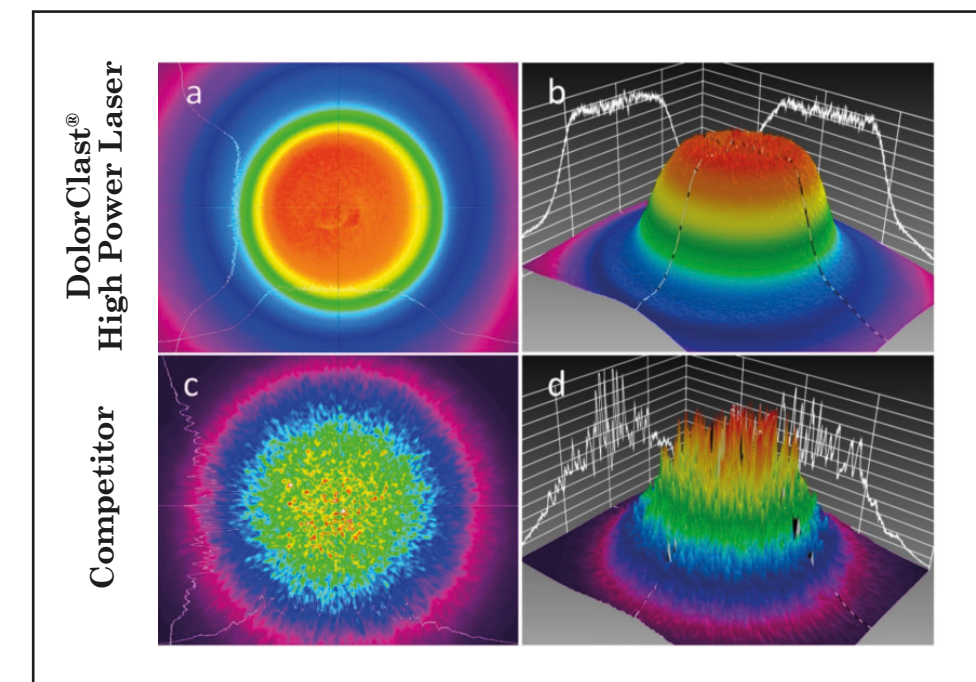
### MAXIMUM THERMAL RELAXATION TIME

- ▶ DolorClast® High Power Laser is a real superpulsed laser and not a sequential gated laser. This modern technology enables the emission of short pulse of 100ns per cycle, 100x shorter than gated lasers can achieve.
- ▶ Such parameters allow transmission of the energy into targeted tissues while providing enough relaxation time to reduce the risks of thermal increase.

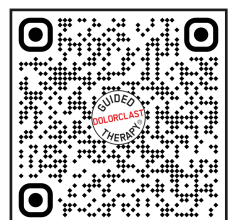
## BEST IN CLASS BEAM QUALITY

### MAXIMUM DISTRIBUTION

- ▶ The intensity distribution of the DolorClast® High Power Laser beam is uniform<sup>29</sup>, enabling the energy to be distributed evenly and effectively to the tissues.
- ▶ Uneven energy distribution can be inefficient when underdosing or lead to tissue damage by overdosing certain areas.



Power density maps recorded with a beam profiling camera.<sup>29</sup>



FULL STUDY



# POWER IS IN YOUR HAND



“The DolorClast® High Power laser has proved to be an invaluable asset to our practice.”

## PRACTITIONER TESTIMONIAL



"The DolorClast® High Power laser has proved to be an invaluable asset to our practice. Its customisable protocols and different modes of action mean it can be adapted to each patient, making it an ideal ally for manual therapy. The remarkable benefits our patients feel from the very first session give them the confidence they need to recover. Its ease of use and manoeuvrability quickly convinced us to use it almost systematically, increasing the attractiveness of our practice at the same time."

**MÉLANIE DEUDON**

Physiotherapist, Megève, France, 2024

## TAILORED PROTOCOLS MAXIMUM PATIENT CARE

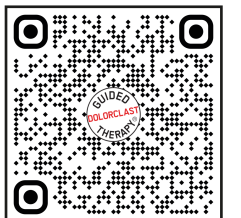
- DolorClast® High Power Laser offers personalized treatments depending on anatomical location, surface of injured tissues and types of patients.

## TARGETED ACTION-MODES MAXIMUM PERFORMANCE

- DolorClast® High Power Laser features 5 action modes, tailored to target specific tissue effects, based on therapeutic objectives: reduction of inflammation, pain-relief, resorption of edema, stimulation of tissular regeneration, or promotion of muscle relaxation.

## GDT COMBINED THERAPIES MAXIMUM SYNERGIES

- The analgesic effect provided by the DolorClast® High Power Laser pre-treatment maximizes overall outcomes of the DolorClast® Shock Waves session.
- A clinical study<sup>32</sup> demonstrated that this combination increases the effectiveness of DolorClast® Shock Waves treatments by enabling the delivery of up to 50% more energy just 5 minutes after laser pre-treatment and up to 100% when waiting 1 hour between treatments.



FULL STUDY





## EMPOWER YOUR PRACTICE. TREAT PAIN AND INFLAMMATION WITH 300W SUPERPULSED LASER

### 1. TAILORING TREATMENTS TO EACH PATIENT

- ▶ Preset parameters to guide application depending on the treatment location.
- ▶ 5 specific action-modes to focus on desired effects (pain relief, anti-inflammatory, anti-oedema, anabolic stimulus and myorelaxant).
- ▶ Create and record your own treatment protocols.

### 2. FACILITATING TREATMENT MANAGEMENT

- ▶ Clear display of treatment settings in real time on screen.
- ▶ Top performance in a portable unit (7 kg) to treat patients wherever they are.
- ▶ Divergent laser beam enabling adaptation to treatment surfaces.

### 3. TIME-SAVING FOR OPTIMIZED CLINIC WORKFLOW

- ▶ Versatile hands-free mode to save time and combine with other treatment modalities or treat more patients per day.
- ▶ Easy to set up and use with step-by-step treatment tutorials.
- ▶ Minimum maintenance with no need for calibration.





**SDCA**   
SWISS DOLORCLAST ACADEMY

## TRAINING - SHARING - PRACTICING

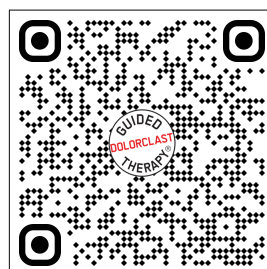
The Swiss DolorClast® Academy (SDCA) is a global research and education platform dedicated to DolorClast® users.

## WHY PARTICIPATE IN A **SWISS DOLORCLAST® ACADEMY COURSE?**

Swiss DolorClast® Academy courses offer you unique benefits:

- ▶ Expert guidance supported by proven evidence-based practice.
- ▶ Up-to-date knowledge, sharing the most recent scientific publications.
- ▶ Clinical and practical application of GDT.
- ▶ In-person courses or remote formats available.

BOOK YOU NEXT  
SWISS DOLORCLAST®  
ACADEMY TRAINING



**10<sup>+</sup>**

YEARS OF SDCA

**100<sup>+</sup>**

TRAINERS

**10000**

COURSES

**100000**

PARTICIPANTS



# JOIN THE MOVEMENT



# GET GDT-CERTIFIED!



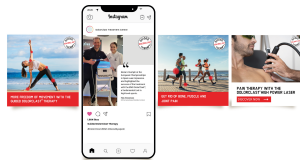
**MAKE THE MOST OF YOUR INVESTMENT IN AN EMS DOLORCLAST® PRODUCT! CERTIFY YOUR PRACTICE TO JOIN OUR NETWORK OF DOLORCLAST® EXPERTS. REGISTER TODAY TO UNLOCK EXCLUSIVE BENEFITS FOR YOUR PRACTICE.**



**BENEFIT FROM OUR SWISS DOLORCLAST® ACADEMY TO KEEP YOU AT THE TOP OF YOUR GAME**



**GET LISTED ON OUR INTERACTIVE PRACTICE FINDER TO INCREASE YOUR VISIBILITY**



**DOWNLOAD YOUR DIGITAL COMMUNICATION KIT TO ATTRACT MORE PATIENTS AND GET RECALLS**



**ENJOY PREMIUM OFFERS TO BOOST YOUR PROFITABILITY\***

\*Offers may vary from country to country.

**GET YOUR PRACTICE  
CERTIFIED**





# LITERATURE

1. HAUSDORF ET AL., BRAIN RES. 2008A;1207:96-101
2. MAIER ET AL., CLIN ORTHOP RELAT RES. 2003;(406):237-45
3. MEZAWA ET AL., ARCH OF ORAL BIOL. 1988; 33(9): 693-694
4. BJORDAL ET AL., BRIT.J.SPORTS MED. 2006; 40(1): 76-80
5. KUO ET AL., WOUND REPAIR REGEN. 2009;17(4): 522-530
6. CONTALDO ET AL., MICROVASC RES. 2012;84:24-33
7. KISCH ET AL., J SURG RES. 2016;201:440-445
8. MEIRER ET AL., J RECONSTR MICROSURG. 2007;23(4):231-6
9. STOJADINOVIC ET AL., ANGIOGENESIS. 2008;11(4):369-80
10. YAN ET AL., ANN PLAST SURG. 2008;61(6):646-53
11. CALGAGNI ET AL., J SURG RES. 2011;171(1):347-54
12. MATTYASOVSKY ET AL., J ORTHOP SURG RES. 2018; 13: 75
13. HOCHSTRASSER ET AL., SCI REP. 2016;6:30637
14. WAUGH ET AL., EUR CELL MATER. 2015 ; 29 :269-280
15. ZHANG ET AL., CELL TISSUE RES. 2011; 346:255-262
16. ZHANG ET AL., STEM CELL RES THER. 2018;9:54
17. WANG ET AL., ARCH ORTHOP TRAUMA SURG. 2008;128(8):879-84
18. WANG ET AL., NITRIC OXIDE. 2009;20(4):298-303
19. GOLLWITZER ET AL., ULTRASOUND MED BIOL. 2013;39:126-133
20. HOFMANN ET AL., J TRAUMA. 2008;65:1402-1410
21. TISCHER ET AL., EUR SURG RES. 2008;41:44-53
22. KENMOKU ET AL., J ORTHOP SCI. 2021;26(4):698-703.
23. CSASZAR ET AL., PLOS ONE. 2015;10:E0140541
24. WUERFEL ET AL., BIOMEDICINES. 2022;10(5):1084.
25. PEDRO DATABASE
26. REINHARDT ET AL., SCI REP. 2022;12(1):18060.
27. ZHANG ET AL., J REHABIL MED. 2021;53(1):JRM00144.
28. MORGAN ET AL., J ORTHOP SURG RES. 2021 DEC 7;16(1):708.
29. KAUB ET AL., BIOMEDICINES. 2022, 10, 3204.
30. MORIYAMA ET AL., LASER SURG MED. 2009; 41(3):227-31
31. KAUB ET AL., BIOMEDICINES. 2023 MAY 4;11(5):1355
32. SCHMITZ ET AL., PREPRINTS. 2021, 2021010138

**MORE THAN**  
**150**  
**MILLION**  
**PATIENTS**  
**CAN'T BE WRONG**  
**SINCE 1999**



"The information in this brochure is solely intended for medical and healthcare professionals.  
The brochure provides information on products and indications that may not be available in all countries."

**"I FEEL  
GOOD"**

E.M.S. ELECTRO MEDICAL SYSTEMS SA  
Chemin de la Vuarpillière 31  
CH-1260 Nyon

Tel +41 22 99 44 700  
EMS-DOLORCLAST.COM  
Email welcome@ems-ch.com

**EMS** 