GUIDED DOLORCLAST® THERAPY

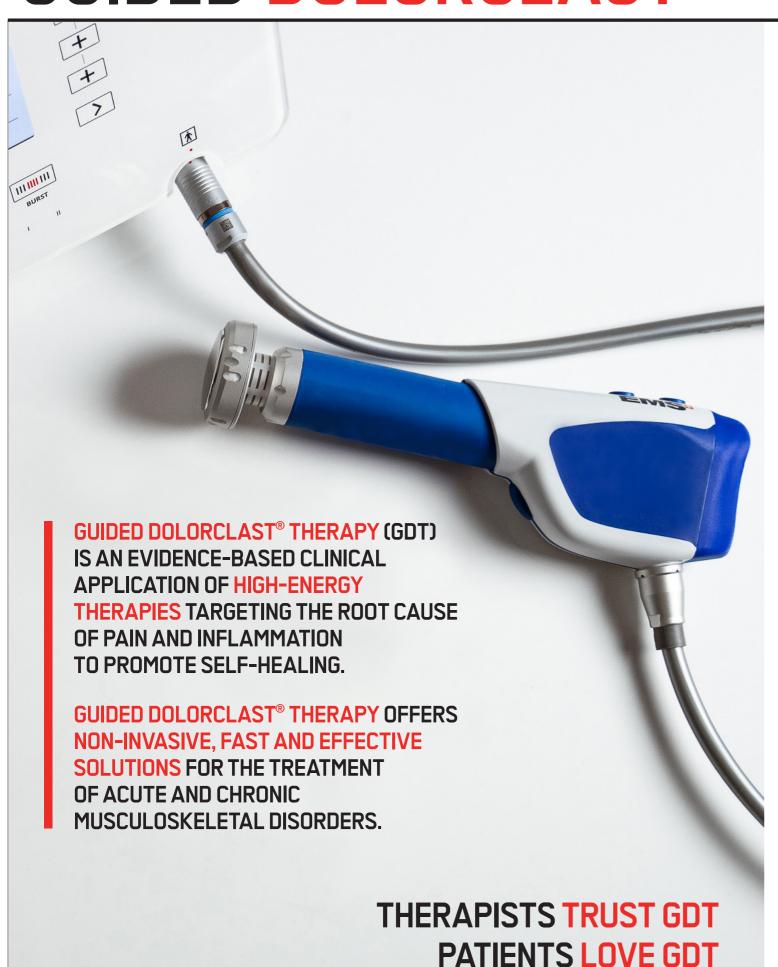
EVIDENCE-BASED HIGH-ENERGY THERAPIES
FROM THE INVENTORS OF RADIAL SHOCK WAVE THERAPY



GUIDED DOLORCLAST®

THERAPY





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

- ► Treat acute and chronic inflammation
- ► Relieve pain
- ► Foster 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 patient-centered approach
- ► Low number of treatments for high compliance
- ► Fast results from 1st 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

GDT GUIDES YOU TO

SUCCESS





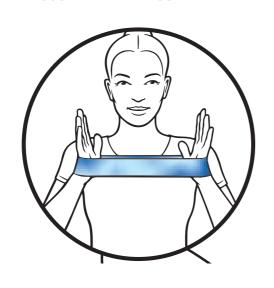


01 ASSESS

ASSESS YOUR PATIENT'S PATHOLOGY
WITH KEY QUESTIONS & TESTS

04 REHABILITATE

REHABILITATE WITH COMPLEMENTARY EXERCISES
TO INCREASE FUNCTION AND SUSTAINABLE RECOVERY







02 ENGAGE

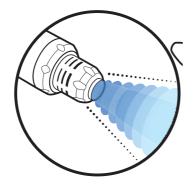
OFFER YOUR PATIENTS A HIGH ENERGY, EFFICIENT AND DRUG-FREE SOLUTION TO:

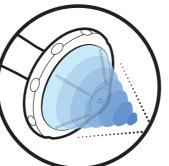
- ► RELIEVE PAIN
- ► TREAT INFLAMMATION
- ► STIMULATE NATURAL HEALING

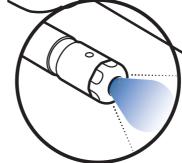
03 TREAT

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.

TREAT INFLAMMATION

- ▶ Reduces the release of Substance P, thus inhibiting neurogenic inflammation and allowing scleraxis expression.¹-²
- ▶ Decreases the amount of Prostaglandin E₂ (PGE₂) responsible of mediating acute inflammation⁴, mimicking the effects of non-steroidal anti-inflammatory drugs (NSAIDs) without side effects.
- ► Induces an anti-inflammatory action, paving the way to healing.

RELIEVE PAIN

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

STIMULATE NATURAL HEALING

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

MOVE, FEEL AND LIVE

BETTER





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
- BONE MARROW OEDEMA
- SPASTICITY
- ► ERECTILE DYSFUNCTION

OFFER YOUR PATIENTS A SOLUTION WITH GUIDED DOLORCLAST® THERAPY

MARIE DESANDRE NAVARRE

Professional kitesurfer, France, 2020 (in picture)

Thanks again to this superb technology!"

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



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. RESULTS FROM 1ST 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



DOLORCLAST® SHOCK WAVE THERAPY











ENERGY: CORNERSTONE OF

SHOCK WAVE THERAPY



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

2

CAVITATION IS KEY FOR SUCCESS

- ► Cavitation plays a major role in the success of extracorporeal shock wave therapy.²³ In the absence of cavitation, some key biological responses simply do not occur in the treated tissues.¹³⁻²³
- ► The effectiveness of shock wave therapy correlates with the levels of cavitation generated by a shock wave device.²³

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

EFFICACY ROOTED IN SCIENCE AND HIGH TECHNOLOGY



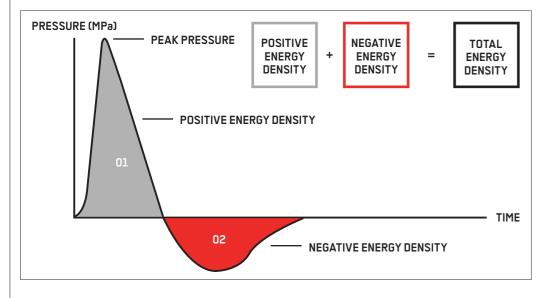
GEL PAD

ENERGY TRANSMISSION AND RESTITUTION

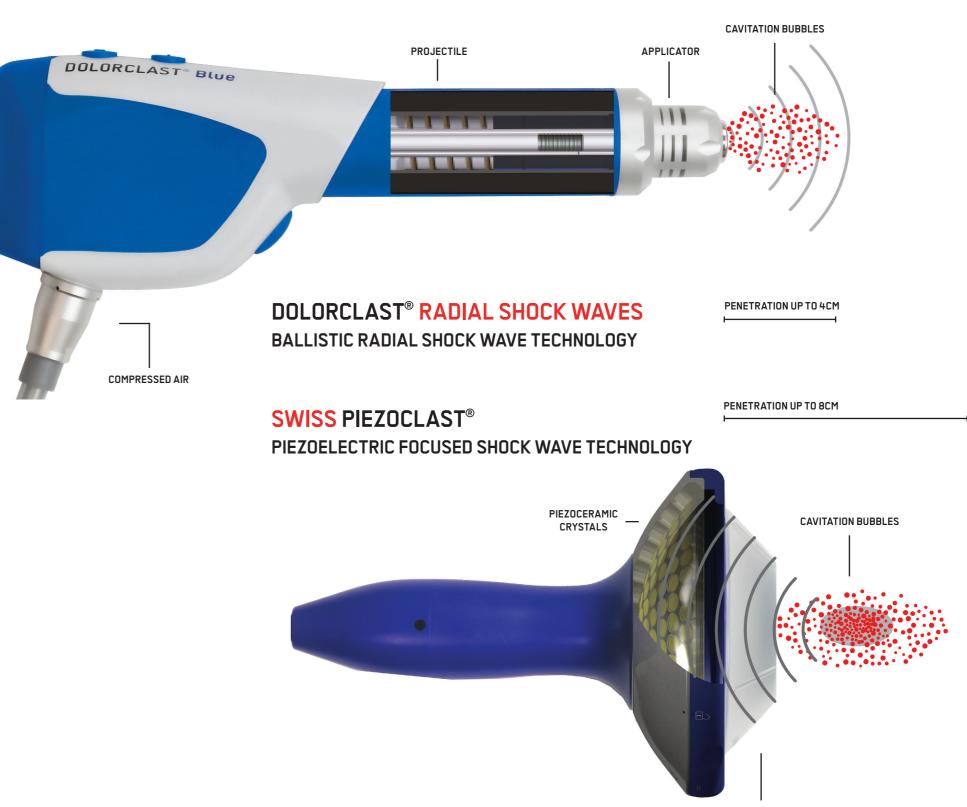
Extracorporeal shock waves are acoustic waves with specific characteristics such as high pressure peak, short rise time and duration, and low tensile amplitude.

A shock wave consists of two phases:

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



HIGH PRECISION TECHNOLOGIES SHAPE TRUE HIGH ENERGY SHOCK WAVES



HIGH ENERGY IS KEY TO SUCCESS

MASTER THE ENERGY AND SET THE GAME



HIGHEST ENERGY – HIGHEST EFFICIENCY

CLINICAL OUTCOMES ACHIEVED WITH DOLORCLAST® DEVICES MAY NOT BE ACHIEVED WITH DEVICES WITH SIGNIFICANT LOWER **ENERGY OUTPUT**

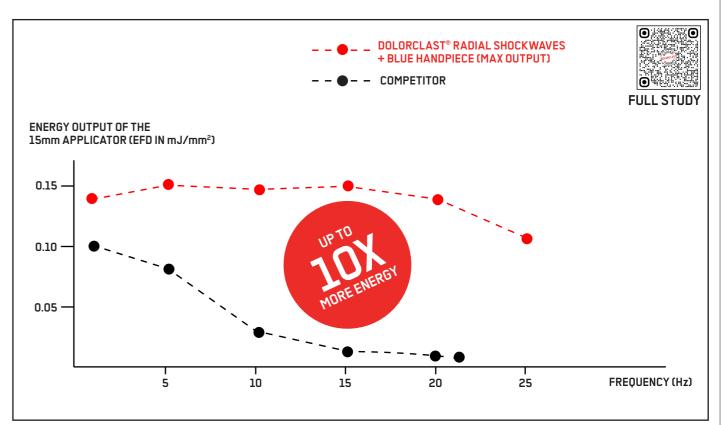
> OF ALL LEVEL 1 CLINICAL TRIALS* **SETTING THE ENERGY DENSITY** IN THE PEDro DATABASE ARE PERFORMED WITH A DOLORCLAST® DEVICE.25

OF PUBLISHED STUDIES* PERFORMED WITH A DOLORCLAST® DEVICE PATIENT OUTCOME IN ONLY 3 SESSIONS.25

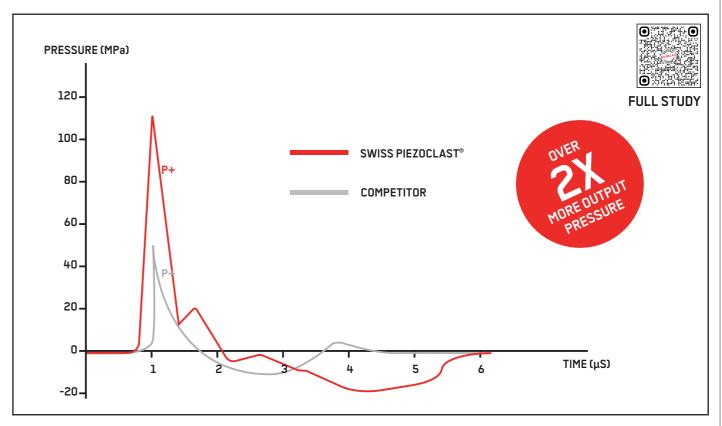
OF ALL STUDIES* DEMONSTRATING WITH A DOLORCLAST® DEVICE.24

FEEL THE ENERGY!

CALL YOUR GDT EXPERT AND BOOK A DEMO



Comparison of energy output at all frequencies. Source of extracted measurements.²⁶



Acoustic characterisation of the Swiss PiezoClast®.27-28

^{*} Using radial shock waves.

PAIN-FREE ACTIVITIES



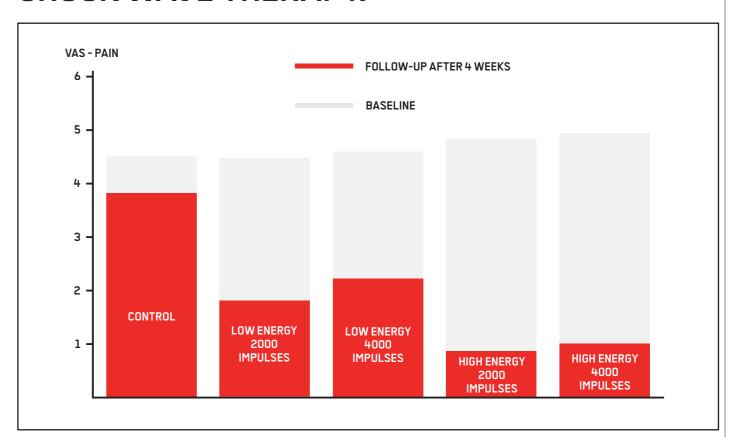


"As a dental hygienist, I'm always on my feet. For the last 7 years, I've suffered severe pain in my left foot. Even walking on the beach, I get shooting pain up my leg. As a result, I haven't been able to wear any high heels without being in pain for hours afterwards. After just one Dolorclast® Shockwave 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 WAVE THERAPY.



Importance of high energy over number of shocks for pain reduction in knee osteoarthritis.²⁹

- ▶ 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

FAST-FORWARD

RECOVERY







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.³⁰
- ► 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.³⁰
- ▶ 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%

Type 1A INJURIES

REDUCED by 23%

Type 2B INJURIES

Type 3B INJURIES

Return to play after treating acute muscle injuries in elite football players with radial extracorporeal shock wave therapy.³⁰



FULL STUDY

DOLORCLAST® RADIAL

SHOCK WAVES





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) enables treatment anywhere at any time.

2. OPTIMAL ENERGY DELIVERY - ENHANCED RECOVERY

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

- ► SMART preset protocols increase treatment efficiency.
- ► ANALGESIC mode with high-frequency settings builds up tolerance 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.
- ► Change the applicators in a flash with the quick-clip system.

SWISS PIEZOCLAST®





FOCUS THE ENERGY MAXIMUM PERFORMANCE FOR DEEP STRUCTURAL PATHOLOGIES

1. DIRECT FOCUSING FOR HIGH-ENERGY RELEASE AND DEEP TARGETING

- ▶ Ellipsoidal alignment of 200 simultaneously expending piezo-electric crystals allows each pressure wave to converge and create a high-energy focused shock wave.
- ▶ Peaks of positive and negative pressure are 2 times higher than other focused devices, delivering the most important energy density to deep-lying tissues.

2. IMPROVING PATIENT EXPERIENCE

- ► Set of 8 gel pads allows for adjustment of the depth of the focus point. The appropriate pad size is available for the correct pathology.
- ▶ Piezoelectric generation of shock wave avoids mechanical micro displacement of handpiece's applicator, thus providing comfortable treatment even for high sensitive patients.
- ► Silent shock wave therapy for smooth treatments.

3. FOCUSING ON THE ESSENTIALS

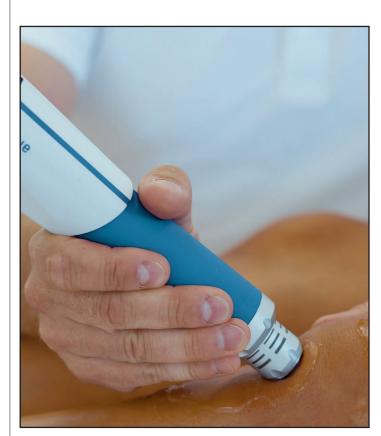
- ► Treat anywhere anytime with transportable plug-and-play device.
- ► Maintenance-free console.
- ► Long handpiece's lifetime to reduce revision's frequency.
- ► Easy handling of the handpiece.

THE RIGHT SOLUTION,

FOR EACH PATIENT



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/mm² delivered at the tip of the applicator

Ideal for:

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



SWISS

PIEZOCLAST®

Indication depth:

► Deep pathologies (0-8 cm)

Maximum energy output:

▶ 0.55 mJ/mm² 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





4 PILLARS OF SUCCESSFUL

GDT LASER THERAPY



CORRECT WAVELENGTH FOR BEST TRANSMITTANCE DELIVERY

HIGH POWER FOR DEEP ENERGY

SUPERPULSED EMISSION FOR THERMAL **PROTECTION**

UNIFORM BEAM FOR OPTIMIZED DISTRIBUTION

► 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.

▶ 90% of laser energy is typically absorbed within the first 10 mm of tissue³¹. As musculoskeletal pathologies lie beneath the skin, a high peak power is required to deliver therapeutically efficient energy to subcutaneous tissues.

▶ Pulse durations over 200ns lead to thermal increase in treated tissues³², 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.

► A laser beam must be uniform to allow homogeneous distribution of the energy to the treated tissues and keep them safe from thermal damage. Top-hat distribution profile is ideal to ensure correct dosing of the energy³¹.

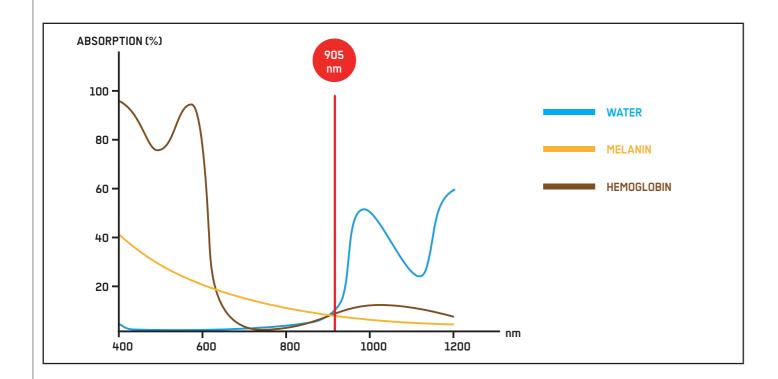
OPTIMAL SETTINGS FOR

PEAK RESULTS



905NM WAVELENGTH MAXIMUM TRANSMITTANCE

► Clinical research³¹⁻³³ 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

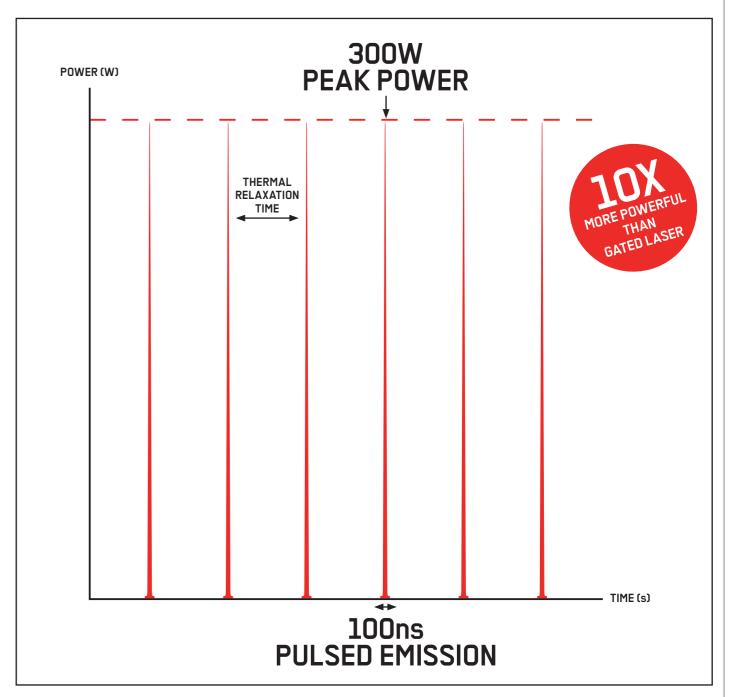
▶ 905nm laser light has been demonstrated to switch off nociceptors responsible for the transmission of pain after only 3 minutes of application³. 905nm wavelength provides quick pain relief without having recourse to any pain medication.

REDUCTION OF ACUTE INFLAMMATION IN 1 HOUR

► Clinical research⁴ shows that exposing tissues to 905nm wavelength diminishes the level of concentration of Prostaglandin E₂ (PGE₂) 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.

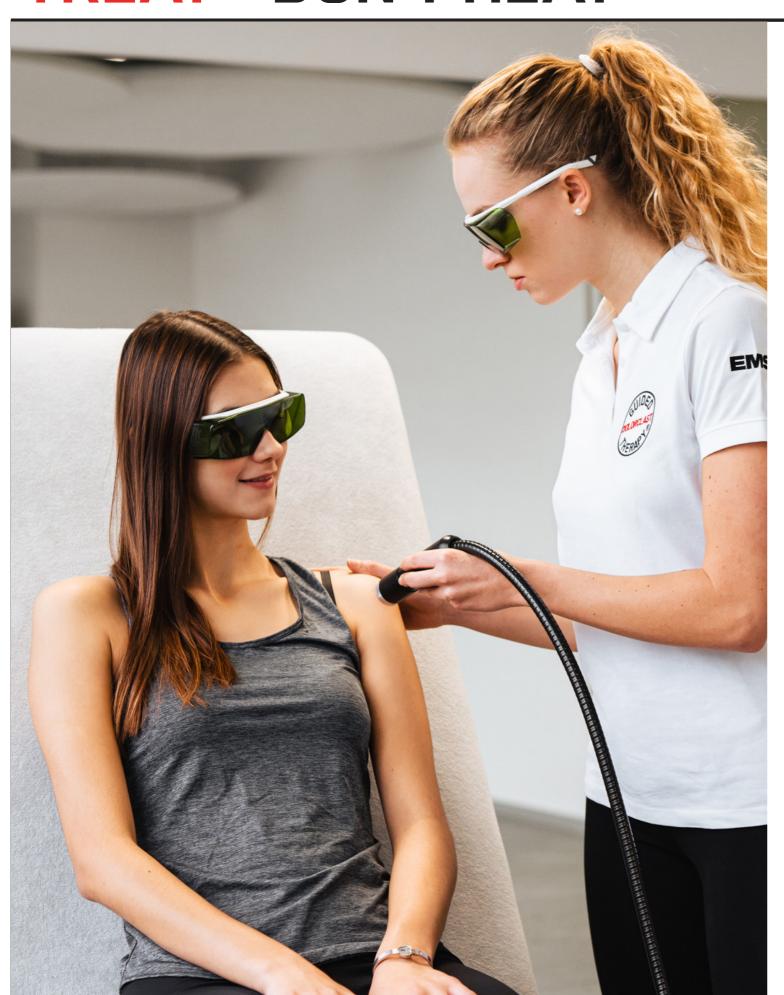
300W PEAK POWER MAXIMUM ACTIVATION BELOW THE SKIN

- ► 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



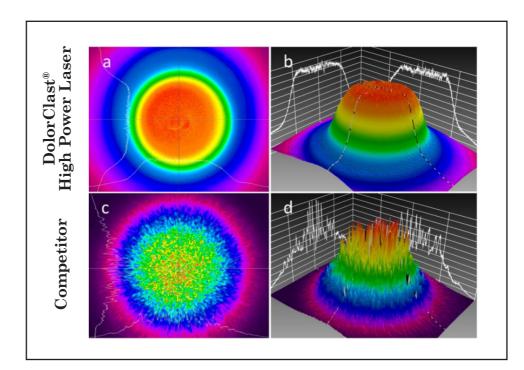


100 NS SHORT PULSES MAXIMUM THERMAL RELAXATION TIME

- ▶ 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 uniform³¹, 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.³¹



FULL STUDY

POWER IS IN YOUR HAND





TAILORED PROTOCOLS MAXIMUM PATIENT CARE

▶ DolorClast® High Power Laser offers the possibility of personalizing treatment time and energy dose according to pathology, surface of injured tissues and types of patients.

GDT PROTOCOL IN 3-5 MIN MAXIMUM PERFORMANCE

▶ DolorClast® High Power Laser features the GDT protocol designed to deliver high energy in only 3-5 minutes to tackle pain and inflammation quickly.

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 study³⁴ 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 treaments.

•

FULL STUDY

DOLORCLAST® HIGH

POWER LASER





EMPOWER YOUR PRACTICE.

TREAT PAIN AND INFLAMMATION WITH 300W SUPERPULSED LASER

1. TAILORING TREATMENTS TO EACH PATIENT

- ▶ Preset onboard protocols to guide application.
- ► Specific action-mode protocols to focus on desired effects (analgesic, anti-inflammatory, anti-oedema etc.)
- ▶ 1 protocol dedicated to hypersensitive patients with skin phototypes level IV or more.
- ► GDT protocol for quick pain relief.

2. FACILITATING TREATMENT MANAGEMENT

- ► Clear display of treatment settings in real time on screen.
- ▶ Top performances in a portable unit (8 kg) to treat patients wherever they are.
- ▶ Divergent laser beam enabling to adapt 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.

SWISS DOLORCLAST®

ACADEMY







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.

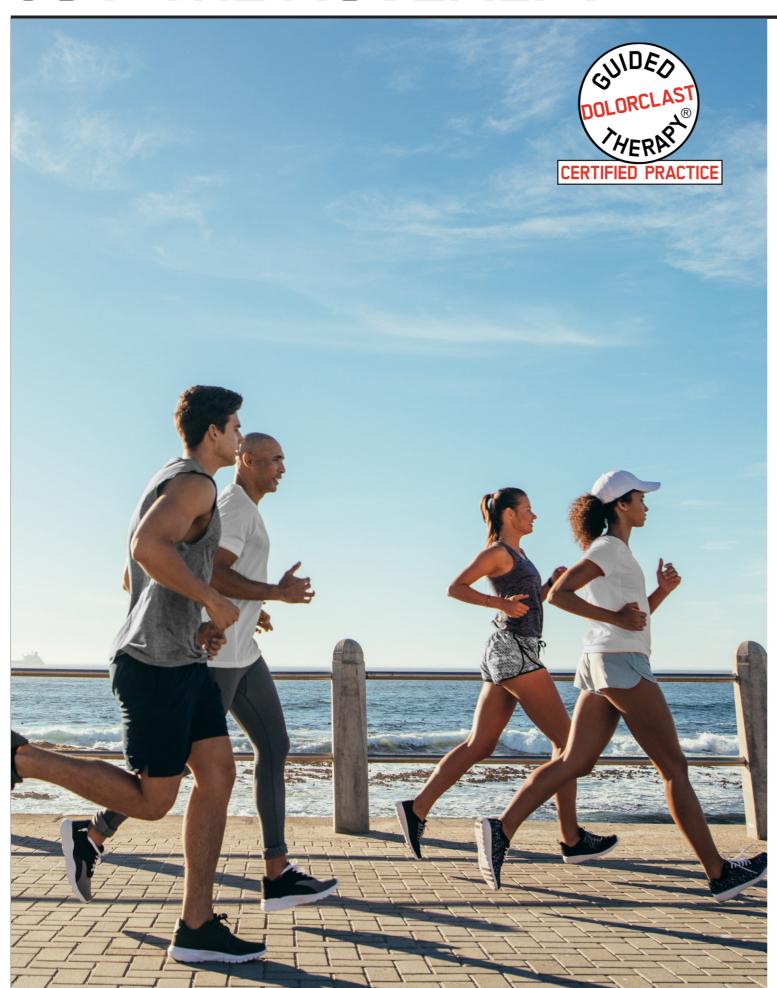
BOOK YOU NEXT
WISS DOLORCLAST®
ACADEMY TRAINING



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.

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

