THERALASE
COLD LASER THERAPY
For Companion Animals
Theralase designs, develops and manufactures patented, superpulsed laser technology utilized in biostimulative applications. The technology is safe and effective in the treatment of pain, inflammation, neuromuscular skeletal conditions and wound care for the human, equine and companion animal markets.

Founded in 1994, Theralase is committed to provide cutting-edge preclinical and clinical research to remain the most clinically and scientifically supported therapeutic medical laser on the market.

The highly trained Theralase team continuously brings our valued customers the most advanced technology on the market, superior customer service, the latest interactive training and the most up to date clinical protocols to accelerate the success of their practice.

Used by thousands of medical practitioners worldwide and improving the lives of human patients for over 17 years. The award winning Theralase TLC-1000 laser technology is now being offered to all healthcare practitioners as a modern way to treat pain and inflammation, safely and effectively.
Injured canines, felines and exotic companion animals, can all suffer from the same neuromuscular skeletal and wound injuries that humans do. Unlike humans, companion animals have limited means to express their pain and discomfort and have learned to endure a great deal of pain before verbalizing their discomfort.

The Theralase superpulsed laser provides a safe and effective way to accelerate the healing of companion animals back to full vigorous health. The non-heating, non-invasive Theralase therapeutic medical laser accelerates the natural healing processes in tissue without any side-effects or discomfort. Depending on the severity of the injury, your companion could be back to full activity within a few treatments.
SAFE AND EFFECTIVE
Theralase’s superpulsed 905 nanometer (nm) near infrared and 660 nanometer (nm) visible red laser technology accelerates healing by reducing pain and inflammation while staying below the Maximal Permissible Exposure (MPE) tolerance for tissue.

Pulsing at 50,000 mW up to 10,000 times per second, the Theralase 905 nm superpulsed laser is able to deliver an exact dose of light energy up to 4” into tissue.

DUAL WAVELENGTH TECHNOLOGY
Theralase combines 660 nm visible red and 905 nm near infrared superpulsed lasers to allow superficial and deep penetration of laser energy of up to 4” into tissue activating all three known cellular pathways.

TRUE LASER DIODES VERSUS LEDs
True lasers are highly directional delivering 100% of the photons to the affected area versus only 5 to 6% with a LED; hence, much better treatment outcomes occur with true lasers versus LEDs.

SHORTER TREATMENT TIMES
The Theralase Multiple Probe utilizes 9 Lasers and is able to treat an area of 20cm² thus reducing treatment times by 90% in comparison to a single laser probe.
THE SCIENCE BEHIND THE PRODUCT

660 NM - ADENOSINE TRI PHOSPHATE (ATP) PATHWAY: HEALING

Theralase stimulates the mitochondria of the cell to produce more Adenosine Triphosphate (ATP or basic cell energy) to accelerate tissue repair. (Proceedings of the National Academy of Science 2003)

Cells that lack energy are unable to participate in the healing process. Laser energy is delivered to injured cells, which are able to absorb the light and convert it into chemical energy, which is then used to accelerate tissue repair. Once cells are fully energized they are able to stimulate each other to rebuild and heal the injured area.

905 NM - NITRIC OXIDE (NO) PATHWAY: INFLAMMATION

Independent research proves that the proprietary Theralase 905nm superpulsed laser technology increases the production of NO by over 700%, increasing vasodilation and decreasing inflammation versus other competitive wavelengths. (Lasers in Surgery and Medicine, 2009).

When tissue injury occurs, the inflammatory process is initiated to immobilize the area and prevent further damage to our body. This process is usually associated with pain caused by inflammation exerting pressure on nerve endings. In order to decrease inflammation in the particular region, the body produces Nitric Oxide (NO). Nitric Oxide has been proven to relax the vascular network, dilate the capillaries, improve vascular function, protect against cell injury and help rebalance the immune response. This process not only reduces inflammation but brings much needed oxygen and other metabolites to the injured tissue aiding in their natural healing.

905 NM - LIPID ABSORPTION PATHWAY: PAIN

Theralase laser technology effectively removes the pain signal at source by rebalancing the sodium potassium pathway. (Harvard Medical School 2010)

Neurons use electrical and chemical signals to transmit information. The transmission of pain is primarily due to an expulsion of sodium ions (Na+) and an influx of potassium (K+) ions into the nerve cell across the cellular membrane, altering the electrical potential difference of the nerve cell. The peak absorption of lipids occurs in the near infrared wavelength range of 905 nm to 910 nm. Since the cellular membrane is a bilipid membrane, laser light in the 905 nm range increases the porosity of the cellular membrane. This increased cellular membrane porosity allows the reabsorption of sodium ions and the expulsion of potassium ions across the membrane rebalancing the sodium-potassium pump and removing the pain signal at source.
TREATABLE CONDITIONS (partial list)

OVER 24 CLINICALLY PROVEN PRE-PROGRAMMED TREATMENTS

- Cervical Arthrosis
- Lumbar Arthrosis / Spinal Stenosis
- Hip Dysplasia
- Arthritis
- Knee Pain
- Surgical Incision Healing
- Knee Ligament Strains
- Post Surgical Edeema
- Shoulder Pain
- Tendinitis
- Strains / Sprains
- Wounds / Lick Granuloma

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TREATMENT

EFFECTIVENESS RATES OF UP TO 90% WITH NO SIDE EFFECTS

- Decrease / eliminate pain
- Reduce inflammation
- Promote new blood vessels and tissue growth
- Promote nerve axon growth
- Faster wound healing and closure
- Non-Invasive / no side effects
- Extremely safe / drug free
- Highly effective for patient (90% efficacy rates)
- Highly effective alternative to other treatments; such as Analgesics, NSAID’s, COX-2 Inhibitors, TENS, Ultrasound, Inferential therapy

ACUTE CONDITIONS
5 TREATMENT SESSIONS*

SUB-ACUTE CONDITIONS
10 TREATMENT SESSIONS*

CHRONIC CONDITIONS
20 TREATMENT SESSIONS*

* Typical number of 8-10 minute sessions
KENT ACKERMAN, DVM
King West Vets, Toronto, Ontario
“The Theralase laser is the most cutting-edge therapeutic laser on the market and has been a wonderful addition to my veterinarian practice. It provides superb safety and high efficacy to my canine and feline patients by providing pain relief, inflammation reduction and accelerated healing in just a few treatments. I routinely use it post surgically with excellent results. The first time I acquired the technology I used it on a cat with an injured tail and after just one treatment, the cat was pain-free and holding his tail high. Amazing. I also find it dramatically helps in marketing my clinic and differentiating my clinic from my competitors thus allowing me to advertise laser therapy without having the burden of purchasing a surgical grade laser. Overall, I can say that I am impressed with the company and the technology. Do yourself and your clinic a favour, get a Theralase”.

B.J. BERESFORD, DVM
Amaranth Animal Hospital, Grand Valley, Ontario
“I was interested in what the laser could do for lameness rehabilitation, both soft tissue & orthopedic injuries, including post surgical rehabilitation; it has proved to be a wonderful adjunct for repair, in many cases obviating the need for NSAID’s”.

KRISTA HALLING, DVM
Oakville Veterinary Emergency Hospital, Oakville, Ontario
“We have been using the Theralase laser in our veterinary surgical referral practice for almost one year. We have been very impressed by both its wound healing abilities and efficacy in management of chronic pain from osteoarthritis. Additionally, tolerance in our small animal patients is excellent”.
ASSESSMENT OF LASER BIOSTIMULATION ON CHONDRAL LESIONS: AN IN VIVO EXPERIMENTAL STUDY

This controlled study examined the effects of GaAlAs laser on the healing of cartilaginous tissue in rabbits. Bilateral chondral lesions created in the femoral medial condyle of the rabbits were either treated with laser or left untreated (control). Histological examination of tissues from animals sacrificed at 2, 6, and 12 weeks post treatment was performed to measure the results.

Conclusion: Laser therapy generated progressive filling with fibrous tissue in the treated group.

LASER-AIDED CIRCUMFERENTIAL SUPRACRESTAL FIBEROTOMY AND LOW-LEVEL LASER THERAPY EFFECTS ON RELAPSE OF ROTATED TEETH IN BEAGLES

This controlled study investigated the effectiveness and periodontal side effects of laser circumferential supracrestal fiberotomy (CSF) and low-level laser therapy (LLLT) on orthodontically rotated teeth in beagles. In the study, eighteen mandibular incisors from nine dogs were divided into three groups by treatment: orthodontic couple force application only, laser CSF following orthodontic couple force application, and LLLT following orthodontic couple force application.

Conclusion: Laser is an effective procedure to decrease relapse after tooth rotation, causing no apparent damage to the supporting periodontal structures.

LOW ENERGY LASER IRRADIATION REDUCES FORMATION OF SCAR TISSUE AFTER MYOCARDIAL INFARCTION IN RATS AND DOGS

This controlled study investigated the effect of Low Energy Laser Irradiation on the formation of scar tissue in experimentally induced chronic infarct in rats and dogs. The myocardial infarction was induced in rats and dogs by ligation of the left anterior descending coronary artery. After induction, the laser irradiation group received near infrared laser irradiation epicardially.

Conclusion: Epicardial Low Energy Laser Irradiation of rat and dog hearts after chronic myocardial infarction caused a marked reduction in infarct size, due to a cardioprotective effect of the low energy laser irradiation.
FINANCIAL BENEFITS FOR YOUR PRACTICE

PRODUCT, SUPPORT AND CLINICAL KNOWLEDGE TO GROW YOUR PRACTICE

PRODUCT DESCRIPTION

SINGLE PROBE
NIR Laser diode: 1x905 nm (collimated):
- Average power: 100 mW
- Peak power: 50,000 mW
Treatment area: 0.1 cm²
*NIR= Near Infrared / *VR= Visible Red

TRIPLE PROBE
NIR Laser diode: 1x905 nm:
- Average power: 100 mW
- Peak power: 50,000 mW
VR Laser diode: 2x660:
- Average power: 25 mW
Treatment area size: 3 cm²
*NIR= Near Infrared / *VR= Visible Red

MULTIPLE PROBE
NIR Laser diode: 5x905 nm:
- Average power: 100 mW
- Peak power: 50,000 mW
VR Laser Diode: 4x660 nm:
- Average power: 25 mW
Treatment area size: 20 cm²
*NIR= Near Infrared / *VR= Visible Red

CONTROLLER
- Portable light weight design.
- Battery operated (rechargable).
- Real time beam detector measures the amount of actual output power emitted from the probe tip.
- Retains up to 256 patient protocols in memory.

STAND
- Custom made to fit the Theralase system.
- Portable light weight design with wheels for easy transportation within the clinic.
- Adjustable boom arm that allows for “hands free” treatment with all laser probes

INTERACTIVE TRAINING
Theralase provides operational and clinical protocol training through interactive training resources available online or via DVD. Simply watch our videos to see how to safely and effectively operate your Theralase laser for a variety of medical conditions.

CLINICAL SUPPORT
Theralase provides ongoing clinical support through monthly webinars on pertinent clinical topics and on-staff healthcare practitioners who are available to discuss patient treatment plans and protocols.

MARKETING SUPPORT
Theralase offers a number of highly effective marketing support materials. An online library of professionally developed marketing materials is accessible 24/7 exclusively to Theralase customers.

TECHNICAL SUPPORT
Theralase offers extended warranty and loaner programs, so you can keep working while your system is being professionally serviced.
Everyone benefits from using the Theralase laser system; your companion animal patients get better through safe and effective treatments, while your practice generates increased revenue. The graph below shows monthly revenues and return on investment calculations for a TLC-1007H system varying upon the number of treatments delivered per month and the cost per treatment.

<table>
<thead>
<tr>
<th>Monthly Treatments</th>
<th>Cost per Treatment</th>
<th>Monthly Revenue</th>
<th>Annual ROI</th>
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<tr>
<td>200</td>
<td>$45</td>
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<td>$13,750</td>
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CALL TODAY FOR A FREE DEMONSTRATION
Experience the Benefits of Theralase TLC-1000 Therapeutic Laser Technology Today

WANT MORE INFO?

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