

THE REPAIRING ENERGY OF PHOTONS







SWISS BIO INOV

Since its creation, Swiss Bio Inov has displayed its competence in the domains of design and manufacture of all types of lasers and electromagnetic spectrum sources.

Swiss Bio Inov, Swiss designer of medical lasers, develops, designs and distributes medical devices for Photon treatment using Bio Photonic modulation, which, with its healing, anti-inflammatory and analgesic actions, helps the practitioner with numerous pathologies.



Over the years, the company has reinvested a large part of its revenue into R&D and has oriented itself in the development of a device using the new medical applications of Athermotherapy®: "LLLT" (Low Level Light Therapy).

The ATP38® concept is the result of ten years of study and innovation.

Thanks to its founder's knowledge of the impact of Bio Photonic modulation on cells, innovation and research are at the heart of Swiss Bio Inov.

By partnering with physicians, researchers and scientists, Swiss Bio Inov introduces its 4th generation of the ATP38® and is becoming the benchmark in the medical field.

Swiss Bio Inov is ISO 13485 certified and the ATP38® device is marked CE 0459.

This technology and innovation is meant for practitioners, to make excellence in patient care affordable.

Today, the ATP38® device is distributed worldwide.

Given the technological possibilities, the device is used in various domains, such as:





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- 8 wave lengths Biostimulation
- Cellular regeneration





- Painless
- Non-invasive



- Healing
- Anti-inflammatory
- Analgesic



LLLT (LOW LEVEL LIGHT THERAPY TECHNOLOGY)

The device functions according to the LLLT (Low Level Light Therapy) principle and has 8 wavelengths. They are transmitted locally and captured by weakened cells. Penetrating in depth to the heart of the cells, the wavelengths stimulate them and accelerate their regeneration processes.

ATP38[®] is a tool that reduces and relieves pain, improves and accelerates healing, treats inflammation, relieves muscular tension and regenerates cells without side effects.



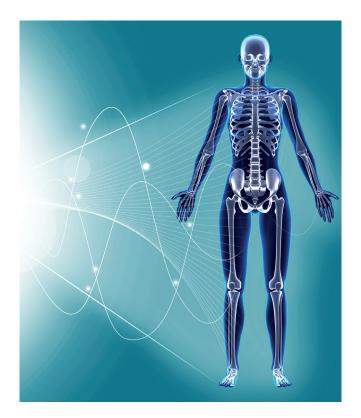
Photons were first used by NASA to accelerate the healing of astronauts' wounds, and since then many clinical trials have proved their efficacy and safety. Thanks to these stimulatory, anti-inflammatory, analgesic and curative properties, today they are applied in all areas of medicine.

The benefits of the sun's electromagnetic spectrum have been used for many centuries in the medical field.



Polychromatic collimated semiconductors (PCSC) emit polychromatic wavelengths, whose radiation optimises cellular metabolism and produces a stimulating effect on ATP (the main energy molecule of cells and the structural unit of DNA). At the dermal level, this leads to an increase in the synthesis of collagen and elastic fibres. This process activates the reparative metabolism of cells and improves the condition of all the layers of skin, muscles, tendons and bone.

The performance of this technology allows the penetration of the dermis and the stimulation of the cell's activity by creating bio-photonic modulation.



PCSCs do not emit heat. The panels emit a combination of 8 wavelengths, from 400 to 820 nm, on the defined area.

This exposes the cells simultaneously to different wavelengths, intensities and pulsations predefined according to the type of treatment prepared based on defined protocols.

Each wave length has its own specificity in terms of area and type of action.

ATP (adenosine triphosphate) is synthesised by a protein called Cytochrome C Oxidase. This protein is made up of Iron and Copper, which renders it hypersensitive to Photons. Once a Photon touches it, it gives the order to make ATP and the cell regenerates. The Cytochrome C Oxidase mitochondrial complex catalyses the transfer of electrons to molecular oxygen during oxidative phosphorylation.

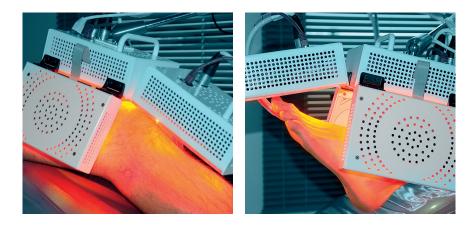
ATP38[®] DEVICE

An exclusive, painless and non-invasive treatment.

The coming together of new technologies associated with the best techniques based on the principle of biostimulation.

ATP38® focuses on power density; i.e. a large concentration of Photons to quickly deliver the total intended dose of energy. The practitioner can configure his or her own treatment protocols.

ATP38® allows large areas to be treated with more precision by scientifically guaranteeing the dose of energy on the treated surface.



This device will help you to:

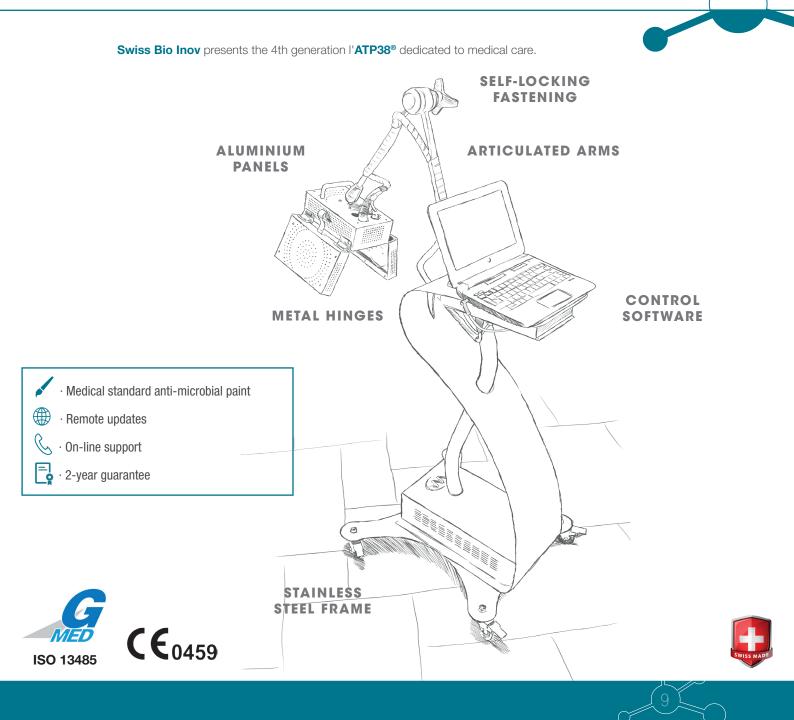
- Diversify the care offered,
- Save time on each type of care,
- Optimise your patient care.

The ATP38® has beneficial effects for your patients:

- Psychological effects (high technology, progress),
- Physiological effects (reduces pain, attenuates inflammation, accelerates healing),
- **Economic effects** (different treatments offered in a single session).

We also provide support and training for concept launch.

THE ATP38® DEVICE





OCTO-SPECTRAL TECHNOLOGY

ATP38[®] uses the 8 wavelengths that correspond to Cytochrome C Oxidase and Porphyrin absorption peaks.

ACCURATE

A cooling system allows temperature maintenance to ensure the accuracy of the wavelength.

QUIET

Unique in the world: no fans or similar accessories in the panels, so no dust or bacteria can accumulate in the device or its immediate environment.

ERGONOMIC

Individual control of wavelengths, frequency and duty cycle. Programming of protocols, patient file (photos and videos), software compatible with Windows 7, 8 & 10. Automatic updates are performed via internet. Not dependent on operator.

SYNTHON PROCESS

Homogeneity of the impact point of the different wavelengths to ensure treatment quality.

POWER

Variable power allowing for treatments calculated in seconds. Saves time for the professional and the patient

ATHERMIC TREATMENT

Healing aid Anti-inflammatory Analgesic



ACTION PRINCIPLE

Photostimulation (or phototherapy) is a non-aggressive non-thermal treatment based on the use of different wavelengths corresponding to a precise scope of action. The photons penetrate the body and are absorbed by the cells.

The radiation emitted by ATP38[®] is characterised by the purity of its 8 wavelengths, which are adjusted to the frequency of absorption peaks of our cellular mitochondria receptors. This correspondence, analogous to 8 open windows with different depths, optimises the dose of energy actually absorbed by the cell, amplifies cell stimulation and produces a significant stimulating effect on ATP (adenosine triphosphate).

ATP38® uses wavelengths based on a dosimetry that is calibrated according to a defined protocol and limited to a certain strength, so as to biostimulate, i.e. cellular activity is boosted, which allows the cell to regenerate and repair itself.



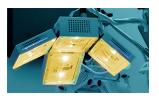
Ultraviolet - 400 Nm



Blue - 470 Nm



Green - 525 Nm



Amber - 590 Nm



Red - 620 Nm



Deep red - 680 Nm



Deep red - 760 Nm

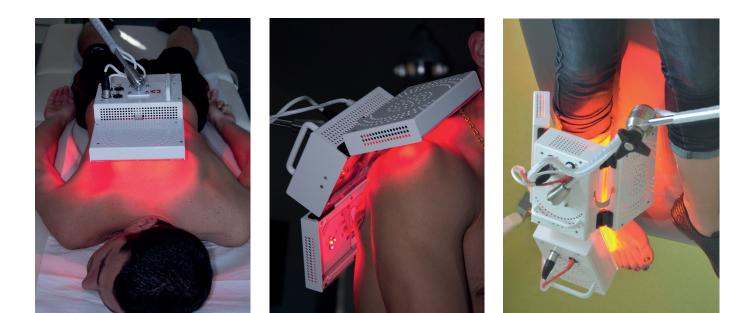


Infrared - 820 Nm



COURSE OF A SESSION IN YOUR OFFICE







ATP38[®] can be used in all pathological conditions associated with pain, inflammation or a need for healing of muscle, ligament or bone.



- Analgesic Action,
- Anti-inflammatory Action,
- Healing Action.

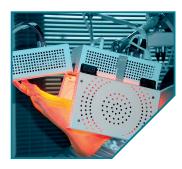
You can offer your patients a treatment at each session. This will allow you to relieve your patients of the possible pain and/or discomfort caused by their pathology.

The results obtained for your patients thanks to the $\textsc{ATP38}^{\circledast}$ will bring you great satisfaction.



CLINICAL EVIDENCE

ANKLE SPRAIN



KNEE SPRAIN



MERALGIA PARAESTHETICA



BACK PAIN



GOLFER'S SHOULDER

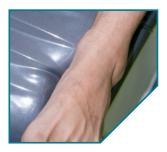


KNEE OSTEOARTHRITIS



CLINICAL EVIDENCE

PROGRESS OF AN ANKLE SPRAIN



1st session



4th session



7th session







Ankle sprain from a football impact. After 2 months of care for the sprain, pain is still present and ankle is swollen. Treatment of 5 sessions every 3 days then 1 session per week for 1 month.

Results visible after the first session, with reduction of the haematoma and attenuation of the pain. After treatment, no more pain and the ankle swelling has completely disappeared.



EXAMPLES OF TREATMENTS



Adhesive capsulitis Arnold's cervicobrachialgia Arthritis Articular distortion



Back pain Bone reconstruction Bursitis



Calcaneal spur Carpal tunnel Cervical osteoarthritis Cervicodynia Coxalgia Coxarthrosis



Difficult healing Disc herniation Discopathy Dislocation Discopathy Diabetic polyneuropathy

E

Epicondylalgia Epicondylitis Epitheliolysis Epitrocleitis Eschar

Fibromyalgia Fracture



Golfer's shoulder Gonalgia Gonarthrosis



Hallux Valgus Healing of tissue lesions



Infection Intercostal pain



EXAMPLES OF TREATMENTS

Leg oedema Ligament injury Low back pain Lumbago

M

Meniscectomy Meralgia Metatarsalgia Muscle injury Muscle strain Muscular contracture Muscular pain



Neuralgia

0

Osteo-articular inflammation Osteochondritis

P

Pain ParaestheticaTear Patellar syndrome Plantar fasciitis Post-traumatic ankle inflammation Post-traumatic ligament sequelae Post-traumatic oedema Problems related to repetitive movements Pubalgia

R

Radical ligamentitis Reflex Rheumatoid arthritis Potentiation of active ingredients Root arthrosis

S

Scapulalgia Sciatica Scleroderma Scapulohumeral periarthritis Sesamoiditis Spinal stenosis Sports injuries Sprain Strain Sympathetic Dystrophy

T

Talalgia Tendinitis Tenosynovitis Torticollis Tissue injury Total knee prosthesis



Ulcer



Wounds



TESTIMONIALS FROM OUR USERS

MR PATRICE TECHE - MASSAGE THERAPIST



"For example, in a typical day, 27 of 36 patients received physiotherapy with ATP38[®]. This means that the device operated for almost 6 hours, knowing that I essentially use the 8-minute "analgesic/anti-inflammatory/healing" application and the 4-minute "reflex sympathetic dystrophy" application. Regardless, in general, the ATP38[®] is very useful to me for all inflammatory pathologies, and even more on the upper and lower limbs. The effect is surprising on osteoarthritis in the limbs, particularly the knee, an immediate and sometimes relatively durable effect that is even more pronounced in an acute flare-up".

DR JEAN-MICHEL SERRA - SPORTS PHYSICIAN



"I have been using the ATP38[®] since May 2015 for athlete pathologies of the French Athletics Team. This technology is very interesting for athletes as it is non-traumatic and painless, but especially because of its healing, anti-inflammatory and analgesic properties. It has proven useful for enabling healing of pathologies encountered. We have had very good results, in particular on calcaneal tendinopathies, including partial ruptures and healing of operated total ruptures. Also for new muscular lesions to help with healing. The most interesting point seems to be the improvement of the bone healing of stress fractures, which are always complicated to care for in our athletes. So it is currently one of the rare technologies adding real benefit to the treatment of high-level athletes".

DR EMILE LEUNUS - GENERAL MEDICINE AND MANUAL MEDICINE



"ATP38": my best assistant! This device acts on almost all pathologies of the musculoskeletal system, whether used alone or, more often, in addition to other treatments, as a potentiator. In other words, ATP38[®] alone can treat certain pathologies, such as bone fractures or necrosis, Morton's neuroma and postherpetic neuralgia. But more often, it supplements one or more of my treatment techniques, making it easier, less painful, faster and more effective. I'm thinking of treatment with manual medicine or mesotherapy or medications for back pain, muscle contractures, joint, muscle and tendon pathologies, neuralgias, paraesthesias. Not including all the conceivable dermatological applications. With a bit of knowledge in programming the device, the applications are almost endless. In addition, the device is very economical: easily profitable, almost no maintenance, no consumables, no fees after purchase for me.

The ATP38[®] has really changed my life and those of my patients".

MR PHILIPPE DEBAL - MASSAGE THERAPIST



"I have been practising for many years and as such, I have tested and used many techniques and methods. Since I have been using the ATP38[®], I notice that it allows me to obtain striking results in complex cases: for a myositis, a 60% improvement of pain in three sessions, for a shoulder prosthesis, a significant gain in range of motion with remarkable reduction of pain on mobilisation, for recurrence of a disc hernia, clear reduction of pain and increased walking distance. After these few concrete examples, I hope that you will be convinced"

BIBLIOGRAPHY

- «The effect of low-level therapy on musculoskeletal pain: a meta-analysis». Arne Nyholm Gam, Hanne Thorsen and Frank Lonnberg : 1992.

- «A systematic review with procedural assessments and meta-analysis of Low Level Laser Therapy in Lateral elbow tendinopathy (tennis elbow).» Jan M. Bjordal, Rodrigo AB Lopes-Martins, Jon Joensen, Christian Couppe, Anne E. Ljunggren, Apostolos Stergioulas and Mark I. Johnson. Biomed Cental. 2008.

- «Efficacy of low-level laser therapy in the management of neck pain: a systematic review and meta-analysis of randomised placebo or active-treatment controlled trials.» Chow RT, Johnson MI, Lopes-Martins RA, Bjordal JM. Lancet. Dec. 2009.

- «Low-level laser therapy for acute neck pain with radiculopathy: a double-blind placebo-controlled randomized study.» Pain Med. Aug. 2010.

- «The effect of low-level laser on postoperative pain after tibial fracture surgery: a double-blind controlled randomized clinical trial.» Sholeh Nesioonpour, Soheila Mokmeli, Salman Vojdani, Ahmadreza Mohtadi, Reza Akhondzadeh, Kaveh Behaeen, Shahnam Moosavi, and Sarah Hojjati. Aug. 2014.

- «Two-year follow-up of low-level laser therapy for elderly with painful adhesive capsulitis of the shoulder.» J. Pain Res. May 2015.

- «Can intractable discogenic back pain be managed by low-level laser therapy without recourse to operative intervention?.» J Pain Res. May 2015.

- «Placebo-controlled investigation of low-level laser therapy to treat carpal tunnel syndrome.» Photomed Laser Surg. Jun 2014.

- «The effect of low-level laser therapy on knee osteoarthritis: prospective, descriptive study.» Soleimanpour H., Gahramani K., Taheri R., Golzari SE, Safari S., Esfanjani RM, Iranpour A. Sept. 2014.

- «The effect of low-level laser in knee osteoarthritis: a double-blind, randomized, placebo-controlled trial.» Photomed Laser Surg. Aug 2009. Hegedus B., Viharos L., Gervain M., Gálfi M.

- «Treatment of medial and lateral epicondylitis-tennis and golfer's elbow-with low level laser therapy: a multicenter double blind, placebo-controlled clinical study on 324 patients.» J. Clin Laser Med Surg. Jun 1998. Simunovic Z., Trobonjaca T., Trobonjaca Z.

- «Effects of low-level laser therapy and eccentric exercises in the treatment of recreational athletes with chronic achilles tendinopathy.» Am J. Sports Med. May 2008. Stergioulas A., Stergioulas A., Stergioulas M., Aarskog R., Lopes-Martins RA, Bjordal JM.

- «Influence of various laser therapy methods on knee joint pain and function in patients with knee osteoarthritis.» Ortop Traumatol Rehabil. May-Jun 2012. Gworys K., Gasztych J., Puzder A., Gworys P., Kujawa J.

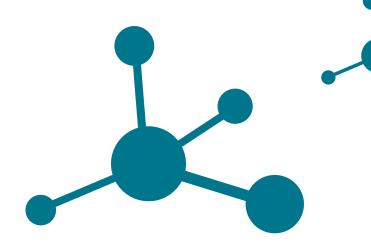
- «Effect of light-emitting diodes therapy (LEDT) on knee extensor muscle fatigue.» Photomed Laser Surg. Oct. Baroni BM, Leal Junior EC, Geremia JM, Diefenthaeler F, Vaz MA.

- «A systematic review with procedural assessments and meta-analysis of low level laser therapy in lateral elbow tendinopathy (tennis elbow).» BMC Musculoskelet Disord. May 2008. Bjordal JM, Lopes-Martins RA, Joensen J., Couppe C, Ljunggren AE, Stergioulas A., Johnson MI.

- «Estimation of the optimal wavelengths for laser-induced wound healing.» Lasers Surg Med. Oct 2010. Ankri R., Lubart R., Taitelbaum H.

Other studies are available.





For more information, contact us

CITYCARE Clinic

www.citycarephuket.com



Manufactured by: Swiss Bio Inov. Class IIa medical device – Technology for medical applications: analgesic, anti-inflammatory, healing. CE0459. Not reimbursable by social security. Please read the information leaflet and instructions carefully. Must be used by qualified and trained health professionals. The practitioner and the patient must wear protective goggles. Contraindicated for paediatric use. Noncontractual images. Do not discard in a public place.