

ΔTP38

PHOTOBIO-MODULATION



PHOTOBIO-MODULATION AT THE SERVICE OF YOUR DENTAL PRACTICE

BOOST THE REPAIRING
POWER OF CELLS

Make a difference...



BIOTECH DENTAL



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The benefits of
photobiomodulation
for your patient
well-being.



DR MIGUEL STANLEY
RECOMMENDS THE ATP38®

As a renowned speaker for over 15 years, Dr Stanley **has transitioned his practice and his team into the digital era.**

Surrounded by a team of multidisciplinary practitioners, this opinion leader who graduated in implantology and cosmetic dentistry manages every aspect of dentistry (oral implantology, cosmetic dentistry, orthodontics, etc) from the most basic to the most complex.

Committed to delivering high-end ethical dentistry, he created the **NOHALFSMILES®** philosophy and the concept of **SLOW DENTISTRY®**, which is designed to improve dental treatment standards to offer patient safety, well-being and comfort.



HIS REVIEW ON THE ATP38®

“

It is something we simply cannot live without!

There is absolutely no doubt that the ATP38® is an essential technology at the *White Clinic*. We use it for every surgical case no matter how simple the procedure and also to accelerate orthodontic movements and for facial aesthetics.

The ATP38® capacity to promote advanced wound healing and reduce **pain is unparalleled by any other technology on the market today.**”

Dr Miguel Stanley

Dentist in Portugal,
United Kingdom and Dubai

DENTISTRY, NEUROLOGY, ONCOLOGY: THE BENEFITS OF PHOTOBIMODULATION FOR OVERALL PATIENT WELL-BEING

THE WORD OF RENÉ-JEAN BENSADOUN, ONCOLOGIST AND PHOTOBIMODULATION SPECIALIST

“

In recent years, Low-Light Level Therapy (LLLT or photobiomodulation) has become one of the fastest growing areas of the medicine.

Photobiomodulation has experienced a kind of breakthrough and we have noticed a change in this practice that has long been perceived as an alternative and complementary form of medicine.

The change in perception by the medical profession and the public institutions has placed it at the heart of today's medicine.



We have seen an increase in the number of applications in various areas, such as the management of the side effects of cancer treatments and in various diseases of the central nervous system.

Around the **triad of its analgesic, anti-inflammatory and healing effects** on tissue, the ATP38® is used successfully in many areas such as physiotherapy, gynaecology, rheumatology, neurology and dentistry. It is also used for improving muscle performance in athletics, sports and in the fields of cosmetics and aesthetics.

These advances are associated with the massive development of physics. The effectiveness of the treatments depends on the parameters used, the dosimetry for photobiomodulation is defined by the radiation and treatment parameters. Each wavelength dosage is suited to a type of application. Photobiomodulation essentially uses wavelengths within a light window of between 600 and 1000 nm.

This treatment technique is in constant development and its applications extend to every area of medicine”.

Prof. René-Jean Bensadoun

Oncologist Nice, France
President-Elect of WALT (2019)
(World Association of photobiomodulation Therapy)



CAPTURE THE ENERGY OF LIGHT

By a process similar to photosynthesis, photobiomodulation makes cells **benefit from the energy of light** (visible and invisible light only, not harmful ultra-violet light).

Its multiple benefits apply **to most dental processes.**

Natural light



Sun



Photons



Photosynthesis

ATP38® light



ATP38® light



Photons



Photobiomodulation

AN INNOVATION BORN OF SCIENTIFIC RESEARCH

FROM SPACE RESEARCH TO MEDICINE APPLICATIONS

Photobiomodulation, or *Low Light Level Therapy (LLLT)*, involves transmitting natural wavelengths to **stimulate cells regeneration processes.**

Discovered by NASA in the early 90s and used in the treatment of astronauts' injuries, photobiomodulation benefits from many years of scientific research.

Thanks to its stimulating, anti-inflammatory, analgesic and healing properties, which have been tried and tested over the last three decades by many studies, photobiomodulation has now spread to many areas of medicine.



ACTING ON LIVING CELLS WITHOUT DAMAGING THEM

Photobiomodulation is the ability of light waves to act on living cells without damaging them; indeed, laser light has the property of modifying the enzymatic activity of cells, or even of inducing cellular proliferation.

This action involves **converting light energy into metabolic energy**, which has the effect of modulating how our cells work and stimulating them.

HOW IT WORKS

The absorption of the wave, produced by phototherapy, by the components of the cellular respiratory chain **stimulates the production of molecules** in the form of ATP (Adenosine Triphosphate).

At the dermal level, this is reflected in an increase in the synthesis of collagen and elastic fibres, which **amplifies the natural restorative metabolism of cells** and improves the condition of every layer of the skin as well as the bones.

AN EXCLUSIVE, PAINLESS AND NON-INVASIVE TREATMENT

The ATP38® device is full of technologies associated with the best available techniques using the **principle of photobiomodulation.**

The ATP38® favours the power density, which means a high concentration of photons to quickly deliver **the total expected energy dose.**

The ATP38® can **treat large areas** with precision by guaranteeing the right dose of energy for the treated surface.



THE ATP38® DEVICE

- ✓ Simple use
- ✓ Short and custom-made protocols
- ✓ Effective treatments

THE BENEFITS OF THE ATP38®



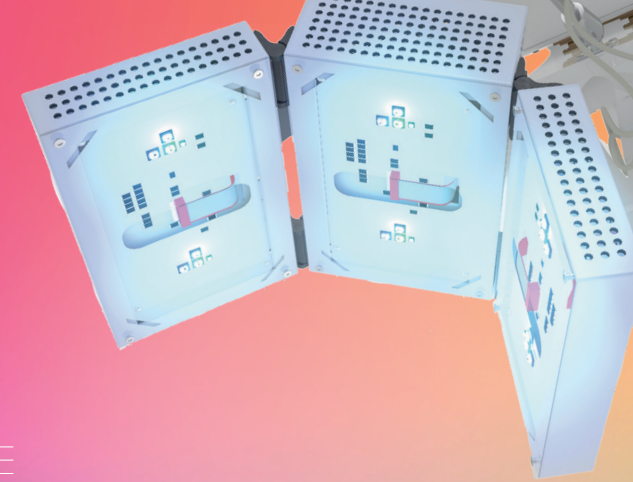
Wound healing



Anti-inflammatory



Analgesic

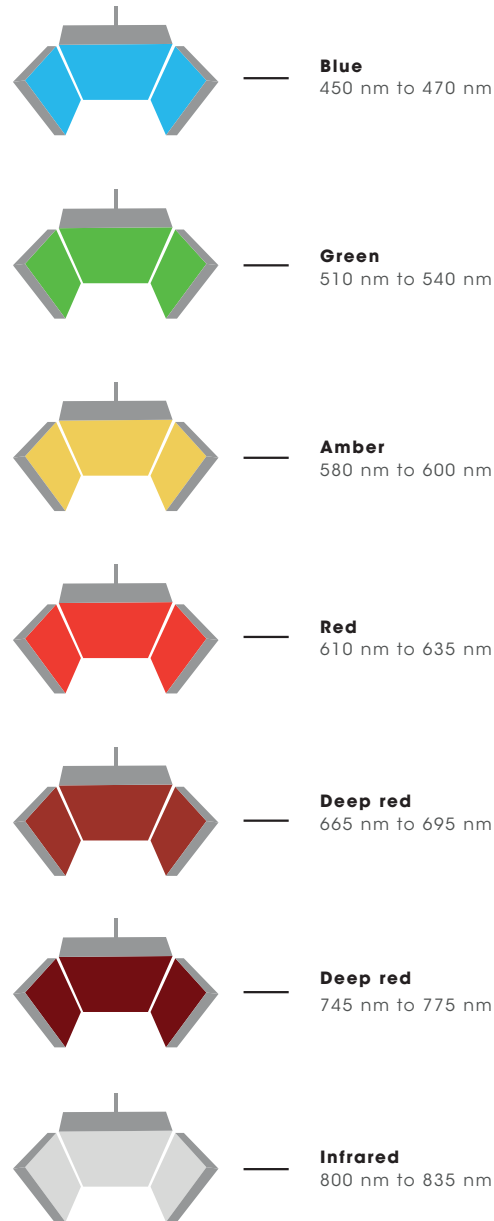


HOW THE ATP38® WORKS

The radiation emitted by the ATP38® is characterised by the precision of its 7 **wavelengths** adjusted to the frequency of the absorption peaks of the receptors of our cellular mitochondria.

This connection similar to 7 windows open on different depths optimises the energy dose actually **absorbed by the cell**. It enhances cellular stimulation and produces an important stimulatory effect of ATP (Adenosine Triphosphate).

The wavelengths used by the ATP38® respect a calibrated dosimetry **defined by a restricted to a certain power protocol** in order to biostimulate the cells.



ATP38® APPLICATIONS IN A DENTAL CLINIC

ORTHODONTICS

With braces or aligners:

- ✓ Reduces inflammation and pain
- ✓ Helps bone healing
- ✓ Reduces treatment time

IMPLANT SURGERY

Bone surgery

- ✓ Better bone regeneration

After implant placement

- ✓ Improves osseointegration

After complicated surgery

- ✓ Analgesic and anti-inflammatory effect

PERIODONTOLOGY

- ✓ Accelerates healing and reduces inflammation

GENERAL PRACTICE

- ✓ TMJ pain
- ✓ Oral mucositis
- ✓ Herpes
- ✓ Lichen planus
- ✓ Gingivitis
- ✓ Extraction
- ✓ Oedema
- ✓ Prosthetic injury...

OTHER APPLICATIONS



AESTHETICS

Dermatology



SPORT

Osteotherapy
Physiotherapy



PATIENT WELL-BEING

Oncology
Rheumatology
Neurology

BENEFITS OF THE DEVICE

1 Technology

Transmission of 7 wavelengths corresponding to the absorption peaks of Cytochrome C Oxidase and Porphyrin.

2 Precision

Microprocessor control to guarantee the accuracy and control of the wavelength energy dose

3 Ergonomics

- ✓ Smooth operation and individual control of wavelengths, frequency and duty cycle.
- ✓ Personalised programming of protocols. Software compatible with Windows 7 and later versions.
- ✓ Online automatic updates.
- ✓ Device supported on wheels.

4 Athermal treatment

- ✓ Wound healing
- ✓ Anti-inflammatory
- ✓ Analgesic

We provide assistance for the equipment installation and ensure training.



BENEFITS FOR A DENTAL CLINIC

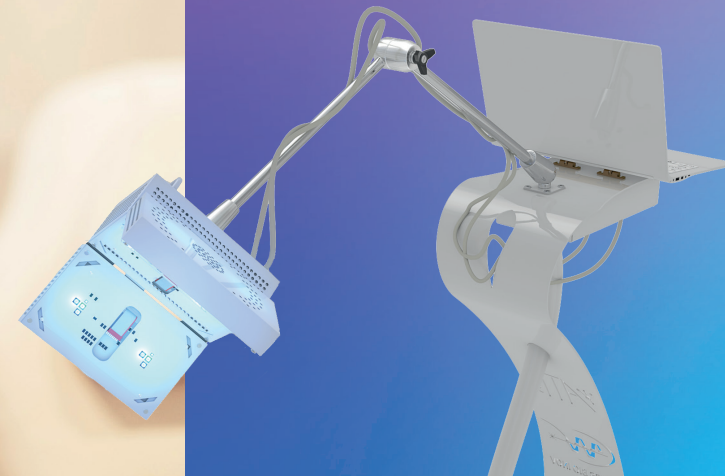
1 Treatments diversification.

2 Time saving on each type of care (anti-inflammatory and healing).

3 Patient care optimization.

4 Decrease post-surgery medicine prescriptions thanks to the effects of photobiomodulation (analgesic, anti-inflammatory, acceleration of healing, etc).

5 Satisfaction of your patients thanks to the clinical results of the treatments provided by the ATP38®.



CLINICAL CASE

1

FASTER DEVELOPMENT OF A TREATMENT WITH TRANSPARENT ALIGNERS

With each change of aligner, an ATP38® session will speed up the bone wound healing, relieve any pain and **reduce the duration of treatment** significantly.

For example, the duration of a 12-month orthodontic treatment can be reduced to 6 months **with a treatment assisted by the ATP38®***.

* if wearing each aligner for 2 weeks.



— **AGE (at the beginning of the treatment)**
16 years



— **DENTAL MALOCCLUSION CLASS**
Class I



— **ORTHODONTIC MECHANICS USED**
Aligners



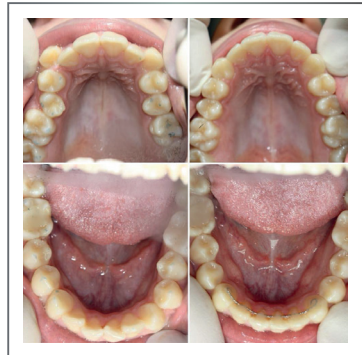
— **NUMBER OF ALIGNERS**
63 maxillary
34 mandibular
Total number of aligners: 97



— **DURATION OF TREATMENT**
16 months (63 weeks)



— **ALIGNER CHANGE FREQUENCY /
ATP38 SESSION**
7 days



* Clinical case of Dr Arash Zarrinpour, France.

CLINICAL CASE

2

FASTER WOUND HEALING AND ENHANCED BONE REGENERATION FOR IMPLANT SURGERY AND BONE GRAFTS

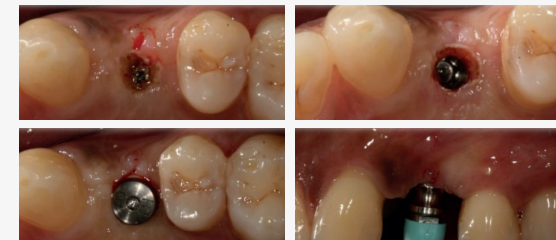
The use of the ATP38® in your surgical and implant treatments **speeds up wound healing, relieves pain** and **enhances bone regeneration**.

When used as part of bone grafts treatments, the ATP38® improves bone regeneration.

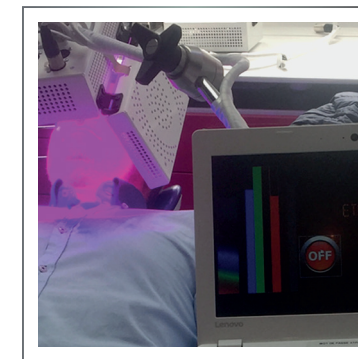


CASE OF HEALING SCREW PLACEMENT AFTER IMPLANT INSERTION

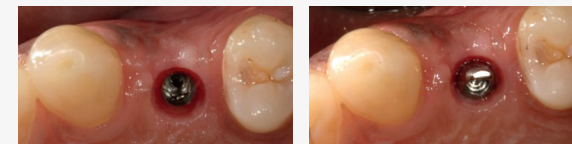
1 — Uncovering the implant using a Diode laser.



2 — A post-operative ATP38® session on «**wound healing**» mode.



3 — Mucosal healing within 1 week.



* Clinical case of Dr Amandine Para, France.

CLINICAL CASE

3

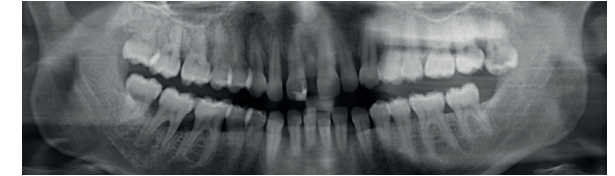
CLINICAL APPLICATION OF THE ATP38® IN PERIODONTOLOGY: TISSUE REPAIR, MAINTENANCE, PERIODONTAL SURGERY

Using the ATP38® at the end of the procedure to biostimulate wound healing, relieve post-operative pain, inflammation and activate healing processes. «Anti-inflammatory, analgesic and wound healing» mode.

Additional sessions may be carried out during the healing period and during the wire removal session using the «biostimulation» mode.



CASE OF MODERATE GENERALISED AND LOCALLY SEVERE CHRONIC PERIODONTAL DISEASE

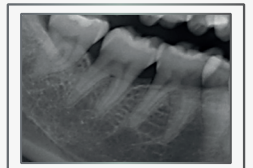
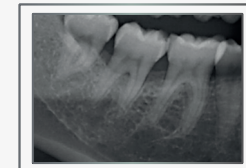
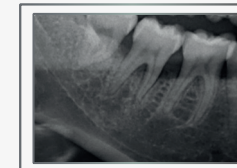


- 1** — Initial debridement (ultrasound, diode laser, elimination of granulation tissue).



- 2** — A post-operative ATP38® session on «**gingivitis**» mode.

- 3** — Wound healing at 8 months and 2 years.



* Clinical case of Dr Amandine Para, France.

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BIOTECH DENTAL

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Manufactured by: Swiss Bio Inov - Distributed by: Biotech Dental.

Medical device class IIa. Technology for medical applications: analgesic, anti-inflammatory, healing. CE0459.

Must be used by qualified and trained healthcare professionals. Protective eyewear must be worn by the practitioner and the patient.

Contraindicated for patients with pacemakers, epileptic patients, pregnant women and prepubescent children.

Images are for representation purpose only. Carefully read the instructions.

Biotech Dental - A simplified company limited by shares (S.A.S.) with a capital of €24,866,417 - Corporate and Trade Register of

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