



The Lighthouse of Genoa has been illuminating the way forward for centuries.

# The medical power of light

## Introducing Genova<sup>™</sup> Laser Biomodulation Therapy

The ideal solution for wound healing and pain reduction

- For analgesic and biomodulation treatments
- The optimal laser wavelength for biomodulation
- A unique collimated homogeneous beam profile
- Fast, patient-friendly and effective

Available only with  
[www.lightwalkerlaser.com](http://www.lightwalkerlaser.com)



LightWalker<sup>®</sup>



Genova Nd:YAG handpiece

## How does biomodulation (LLLT) work?

Low-level laser therapy (LLLT) involves the application of low-power laser light to injuries and lesions. It is used to promote wound healing in cases of healing defects by inducing an increase in mitotic activity and the number of fibroblasts, as well as collagen synthesis, neovascularization and a decreased level of pain.<sup>2</sup> Laser light is absorbed into the mitochondria and cell membranes of the target cells, leading to an increased level of molecular kinetic energy.

## What is the Genova handpiece?

The Genova handpiece was specially developed for Fotona's LightWalker laser system for inducing highly effective wound healing and pain reduction. The handpiece creates a large spot size with a unique collimated homogeneous beam profile of Nd:YAG laser light.

## Award winning LightWalker laser technology

LightWalker combines dentistry's best wavelengths, Er:YAG and Nd:YAG, in one powerful system, allowing practitioners to perform the broadest range of dental procedures. Biomodulation with the Genova handpiece as a standalone therapy, or as an adjunct step in surgical treatments, is an ideal complement to many procedures.

LightWalker's Nd:YAG laser light has an optimal infrared wavelength that penetrates homogeneously into the tissue. The effect of the Nd:YAG wavelength on healing through the stimulation of growth factors is thus substantially higher than with other wavelengths. The Genova handpiece with its unique beam profile also treats affected areas with exceptional precision and control.

### Sources

1 Usumez et al. Effects of laser irradiation at different wavelengths (660, 810, 980, and 1,064 nm) on mucositis in an animal model of wound healing. *Lasers Med Sci.* 2014 Nov;29(6):1807-13.

2 Demirkol et al. Effectiveness of occlusal splints and low-level laser therapy on myofascial pain. *Lasers Med Sci.* 2015 Apr;30(3):1007-12.

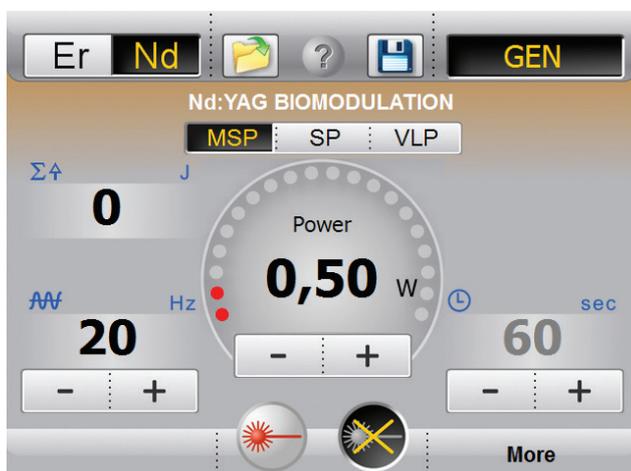
## Exclusive advantages of the Genova protocol

The Genova treatment protocol is easy for any dentist to perform. It is clinically proven to stimulate wound healing in skin, mucosa and bone tissue, and also provides pain reduction and anti-inflammatory effects.

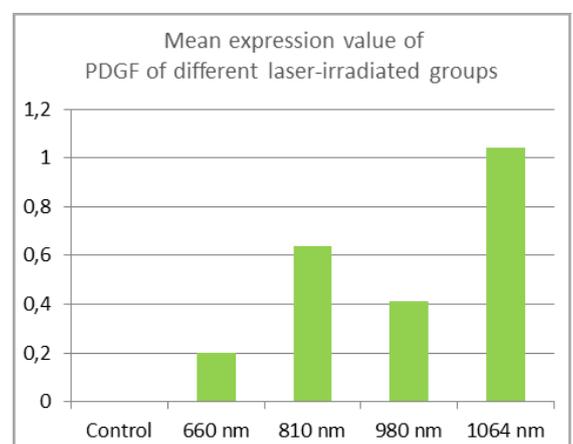
## Getting started with the Genova protocol

To get the most out of the LightWalker dental laser system and the Genova handpiece, attend our training programs co-organized with the Laser and Health Academy and the University of Genoa in Italy. During these intensive workshops, participants cover basic LLLT topics and gain an in-depth understanding of the Genova clinical biomodulation protocols.

[www.laserandhealth.com](http://www.laserandhealth.com)  
[www.centrolaser.unige.it](http://www.centrolaser.unige.it)



LightWalker Nd:YAG biomodulation screen



Higher effect of the Nd:YAG wavelength on healing by stimulation of growth factors as compared to diodes.<sup>1</sup>

To learn more about LLLT and what LightWalker can do for your practice contact Fotona at [info@lightwalkerlaser.com](mailto:info@lightwalkerlaser.com) today.