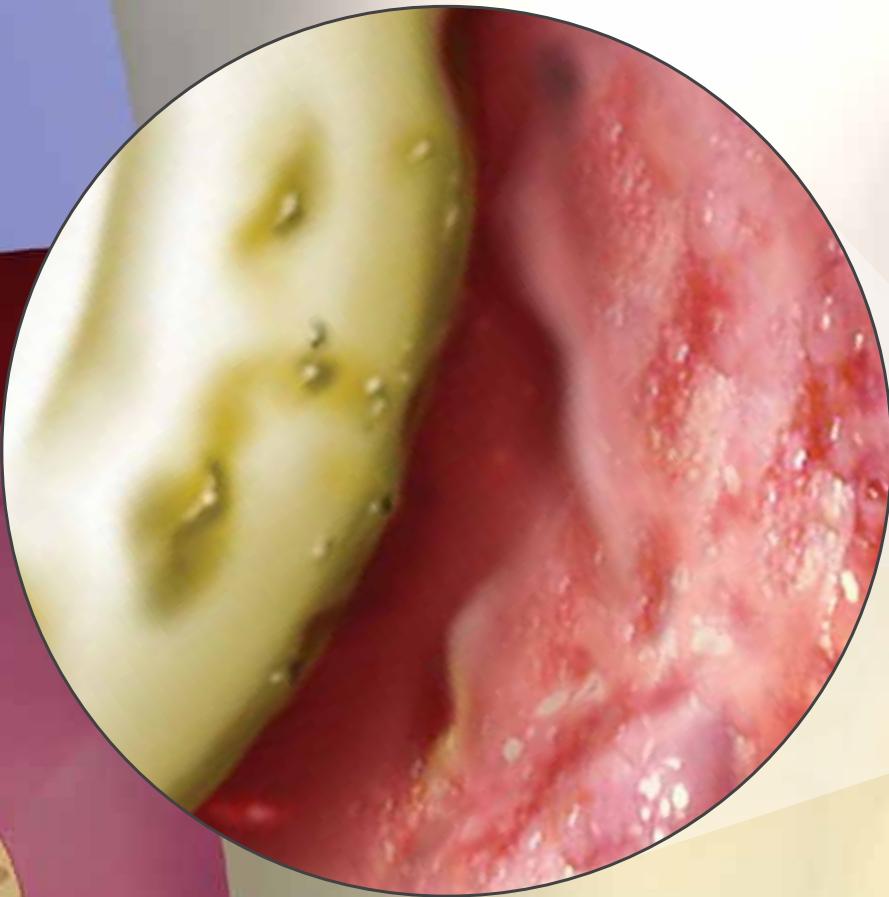


*waterlase***iPlus*™

*iLase**™

*INTRODUCING THE
DUAL WAVELENGTH APPROACH TO
DEEP POCKET THERAPY
WITH NEW ATTACHMENT*



BIOLASE | 25 YEARS
THE WORLD LEADER IN DENTAL LASERS

THE FUTURE OF LASER PERIODONTAL TREATMENT IS HERE TODAY FROM BIOLASE.

Dual Wavelength Deep Pocket Therapy with New Attachment (DPT) using the WaterLase iPlus and BIOLASE-patented Radial Firing Perio Tip™ (RFPT) is a minimally invasive, FDA-cleared therapy for moderate to advanced gum disease that promotes cementum-mediated periodontal ligament new-attachment to the root surface in the absence of long junctional epithelium.

WaterLase 2,780nm YSGG laser energy is especially effective for minimally-invasive removal of both subgingival inflamed tissue and calculus deposits, to prepare the pocket and surface of the tooth for healing and new attachment. WaterLase laser systems, including the iPlus, have FDA clearance for both of these indications.*

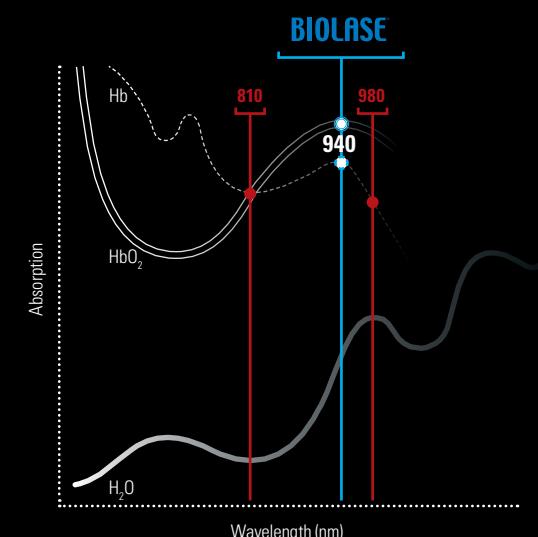
- 2,780nm YSGG and 940nm diode wavelengths are well established for Deep Pocket Therapy with New Attachment and Sulcular Debridement respectively
- The SOFT-TISSUE effects of the 940nm diode complement the effectiveness of YSGG on soft tissue, bone, and tooth structure
- Comprehensive protocols address the full range of periodontal disease from gingivitis with the 940nm diode protocol only to moderate and severe periodontitis with DUAL WAVELENGTH combination therapy
- Treatment protocols not dependent on the use of antibiotics, anti-inflammatories, or occlusal adjustments
- Periodontal Therapy founded on the latest clinical research and years of experience from global laser pioneers



COMBINING YSGG DPT WITH THE iLASE 940NM DIODE LASER ADDS SIGNIFICANT CLINICAL BENEFITS.

The iLase diode laser system uses the 940nm wavelength developed exclusively for dentistry by BIOLASE. A comparison to other diode wavelengths shows that 940nm laser energy is better absorbed by hemoglobin and oxyhemoglobin. This makes the 940nm especially effective for:

- Removal of diseased, infected, inflamed and necrosed soft tissue within the periodontal pocket
- Reducing bleeding prior to scaling and root planing
- Positive biostimulation effects, well-documented in the literature



Walsh, Laurence. 2010. "Maximising gingival aesthetics using lasers." Australasian Dental Practice (August): 48-51.

iLase™

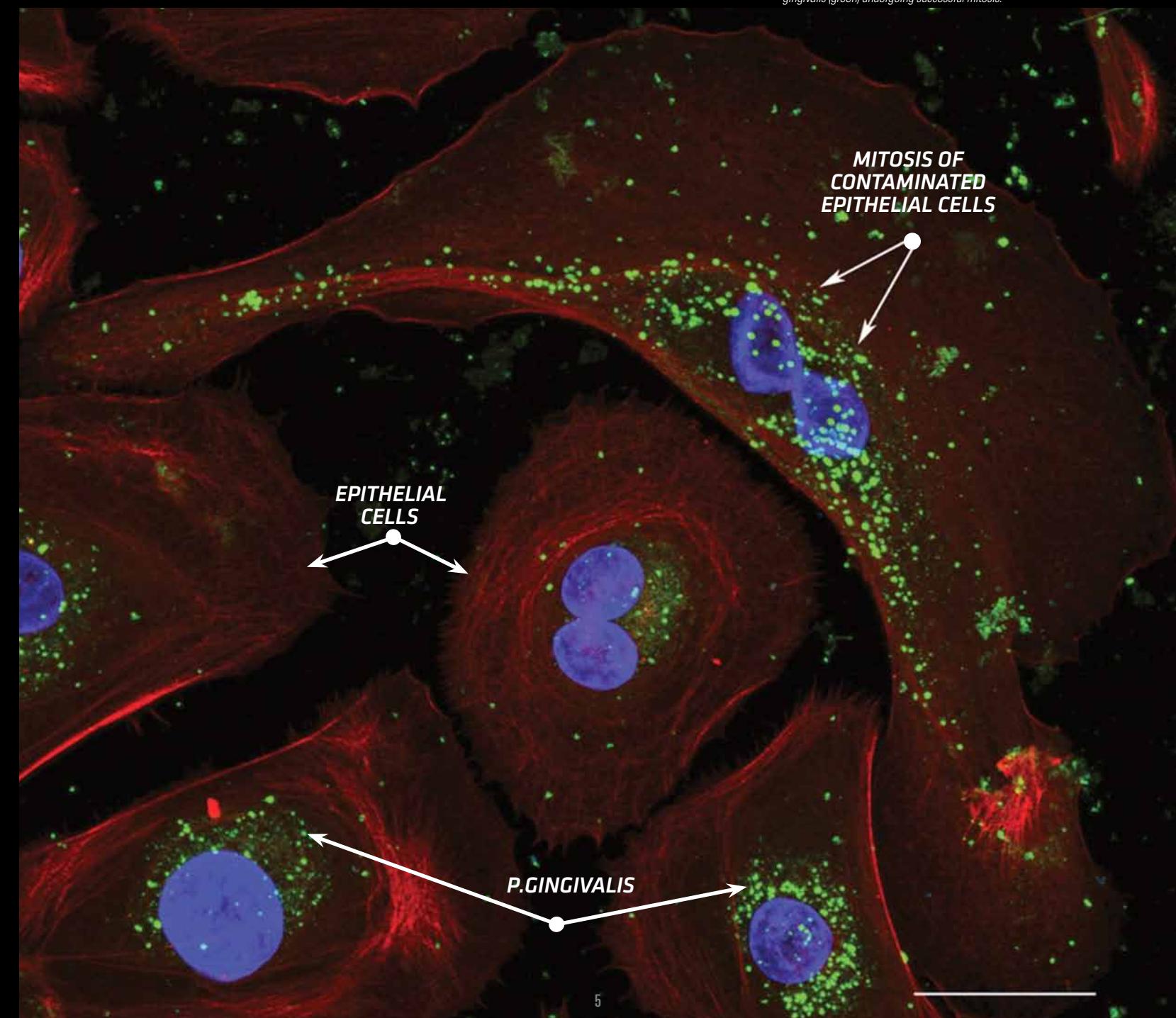


Actual Size

The iLase 940nm diode laser is FDA indicated for removal of infected tissue from the epithelial lining. By affecting the diseased epithelial lining, the iLase laser reduces dark-pigmented, virulent periodontal disease pathogens such as *P. gingivalis*, which invade epithelial cells and interstitial space, compromising periodontal pocket homeostasis.

Black-pigmented anaerobes such as *Porphyromonas gingivalis*, *Prevotella intermedia*, and *Prevotella nigrescens* have been implicated as pathogens associated with the initiation and progression of periodontitis.

Figure by Prof. Özlem Yilmaz. (*The chronicles of Porphyromonas gingivalis: the microbiome, the human oral epithelium and their interplay* Microbiology 2008) shows three-dimensional confocal scanning fluorescence microscopy showing a 24 h-infected primary GEC (actin, red; nuclei, blue) with high numbers of intracellular *P. gingivalis* (green) undergoing successful mitosis.





THE WATERLASE iPLUS YSGG LASER IS A TRUE ALL-TISSUE LASER.

Unlike other lasers used in periodontal therapy, the 2,780nm YSGG WaterLase iPlus is indicated for more than just soft tissue. It is safe for use on bone and tooth structures, making it an extremely versatile tool.



PRE-OP



IMMEDIATE POST-OP

PERIODONTAL SURGERY WITHOUT TISSUE TRAUMA

Most periodontal lasers cut tissue using heat. The WaterLase iPlus combines YSGG laser energy and a patented spray of water to cut soft tissue and bone without heat, with benefits reported such as less swelling and patient post-op sensitivity, for a better patient experience and greater case acceptance.

In soft tissue mode, the 2,780 nm YSGG WaterLase iPlus laser energy penetrates into tissues to seal blood vessels as it cuts, providing excellent hemostasis, which in turn provides you with a better field of vision during surgery.*

Soft-tissue is mostly water, so the iPlus laser energy is absorbed immediately in the process of cutting without raising the temperature of the tissue. Bone is also primarily made up of water and hydroxyapatite, so the iPlus cuts it without heat as well. The iPlus water spray enhances its "cool cutting" as well.



PRE-OP



POST-OP

IMPLANTS

WaterLase iPlus improves productivity through a range of implant related applications:

- Creating an aesthetic emergence profile
- Bone resection for autogenous bone graft harvesting
- Osteoplasty and osteotomy
- Implant recovery

OSSEOUS CROWN LENGTHENING FOR SAME DAY REFERRALS

The minimally invasive nature of the WaterLase iPlus YSGG laser can help minimize tissue displacement and flap preparation in osseous crown lengthening. It assists in performing an externally beveled gingivectomy, shaping the free gingival margin, troughing, and recontouring and smoothing bone.



"This not only enhances results in the hands of a periodontist using the WaterLase for regenerative procedures, it is also an alternative treatment for the general dentist who is treating mild to moderate periodontal cases. Patients are also more likely to accept treatment when they hear that it is minimally invasive, and patients who have accepted treatment are getting positive results and avoiding the side effects that they have heard about from conventional treatment."

- Dr. Michael Schlesinger, Periodontist, New York, NY

*Moritz A, Beer F, Goharkhay K, Schoop U, Strassl M, Verheyen P, Walsh L, Wernisch J, Wintner E (ed.): "Oral Laser Application"; Quintessenz Verlags-GmbH, Berlin, 2006, p 389

TECHNICALLY SUPERIOR BY DESIGN.

For ease of use, ergonomics, and performance the WaterLase iPlus is the most technologically advanced laser system in periodontics.

The YSGG WaterLase provides excellent coagulation of soft tissue, because it penetrates deeper into water-rich tissue. Along with the iPlus's long pulse, high pulse repetition rate, and precise water control, this makes iPlus among the best surgical laser tools.*

The iPlus features the only illuminated contra-angle handpiece on any dental laser. BIOLASE's patented contra-angle design allows you to easily and precisely move the laser tip around the treatment site, while iPlus illumination provides the best visibility.

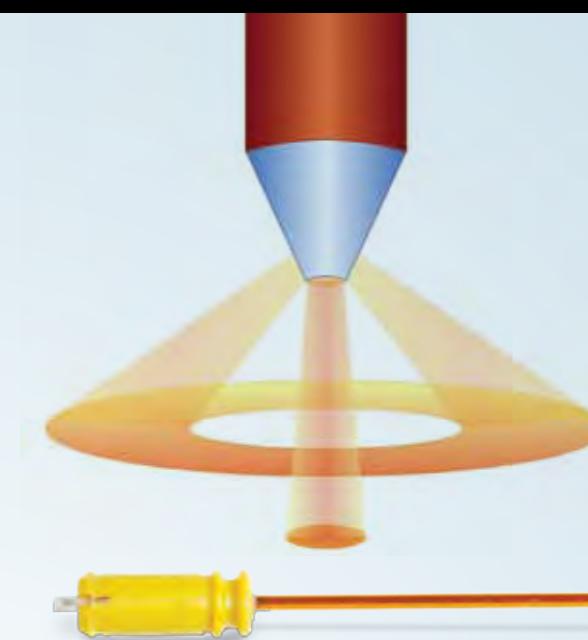
The iPlus handpiece is also the smallest handpiece, an important consideration for pediatric patients and working in the back of the mouth.



"As a Periodontist, I have been waiting to buy a laser until there was a reliable one that could address hard and soft tissues safely and efficiently. The WaterLase has now become my 'instrument' of choice in many procedures, including ones that I didn't think could or should be performed with a laser. I liked my first WaterLase so much that I recently upgraded to the new iPlus, and it's awesome!"

**Beth Gold
Periodontist
Marysville, WA**

The iPlus has the lightest, most flexible trunk fiber ever on a WaterLase system. Titanium fiber cable and an extremely small diameter give the iPlus handpiece virtually zero resistance in your hand, to help eliminate fatigue so you can easily access any treatment site. Words don't really describe it — you have to try for yourself.



THE RADIAL FIRING PERIO TIP™

Our patented Radial Firing Perio Tip (RFPT) is superior to tips traditionally used by laser systems for periodontal therapy. The 14-mm long RFPT is based on BIOLASE's patented EndoLase™ tips but features a unique design that precisely tapers the end of the 500µm diameter tip. The result is primary radial emission of laser energy with a portion of straight emission, and better access to the narrow part of the periodontal pocket since the tip has no side edges.

Compared to most tips and fibers that only emit straight laser energy, the radial energy provides more efficient irradiation of diseased or inflamed soft tissue as well as calculus deposits for treating moderate to advanced periodontal disease. Decreasing the amount of energy emitted from the end of the tip virtually eliminates the possibility of damaging the periodontal ligament when the tip is used vertically in the periodontal pocket.

BIOLASE also offers the most comprehensive selection of traditional straight firing tips for periodontal surgery, implant recovery, and osseous crown lengthening, to enable you treat all of your patients' needs.

COMPREHENSIVE WATERLASE PERIODONTAL TRAINING AVAILABLE

At BIOLASE, our goal is to maximize the benefits of laser ownership for you, your patients, and practice. We offer training specially designed for WaterLase Dual Wavelength DPT and other applications with your WaterLase iPlus laser.

A two-day course in WaterLase iPlus periodontal applications, conducted by periodontists, can be included with your purchase of the laser, which covers:

- Case selection, diagnosis, and treatment planning
- Open flap periodontal surgery, including flap designs
- Root amputation
- Reverse vestibuloplasty
- Gingivectomy and gingivoplasty
- Bone resection
- Removal of granulation tissue from bony defects (furcation)
- Osseous cutting and contouring
- Osseous periodontal surgery, including bone resection
- Frenectomy
- Soft-tissue ablation (de-epithelialization)

View a recorded online seminar on Lasers in Periodontics with Bret Dyer, DDS, MS, Private Periodontal Practice, Sugar Land, TX; and on Lasers in Oral Surgery with Michael Black, DMD, Private Oral Surgery Practice, Metarie LA at lasercast.biolase.net



Revolutionizing Surgery in Dentistry and Medicine

	Industry Leading Technology		Clinical R&D		Training & Certification		Service & Support		Practice Integration
<p>BIOLASE Technology is revolutionizing surgery in dentistry and medicine, specializing in the development, manufacturing, and marketing of lasers, imaging systems, and related products to provide biological treatments that reduce pain and are safer for patients.</p> <p>We design and manufacture nearly 100% of our laser systems, components, and subassemblies at our headquarters in Irvine, California, which also houses engineering, clinical R&D, regulatory, customer care, training, sales and marketing, and administrative. BIOLASE is ISO 13485 certified and FDA GMP. We also have manufacturing capabilities in Floss, Germany.</p>	<p>Our highly skilled R&D team has extensive medical-device and laser-development expertise, focused on improving and extending our dental and medical product portfolio into the future.</p>	<p>We are a leader in laser education through the World Clinical Laser Institute. With more than 10,000 members worldwide, the WCLI is the world's largest laser education organization. Certification Training Courses combine lectures, hands-on exercises, and/or live patient demonstrations.</p>	<p>We have the largest, most experienced team of Field Service Engineers in dental technology, a Service & Support Hotline at 800-321-6717, and dedicated inside service engineers expert in remote troubleshooting.</p>	<p>We help you fully incorporate WaterLase technology in your practice — from staff training to practice marketing support.</p>					

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