waterlase iPlus™ Dual Wavelength All Tissue Laser

BREAKING THE SPEED BARRIER

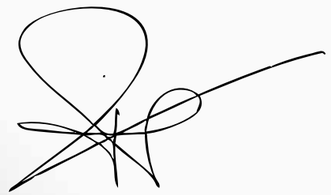
BIOLASE®

BIOLASE presents to you the best laser ever!

The WaterLase iPlus™ All Tissue Laser system – the most versatile and biological instrument you can add to your practice – is the first laser that's BREAKING THE SPEED BARRIER with the fastest cutting, quickest learning curve, and ultimate payback.

WaterLase is the alternative technology you've always wished you had for patient friendly treatment. Now you have every reason to add it. Its cutting speed is equal to the conventional high speed dental drill, while offering far superior clinical results and virtually painless dentistry. Its informative and intuitive graphical user interface makes it friendly to learn and use.

Dentistry has long awaited real change and new technology. Now that we've combined the greatly enhanced clinical results and patient comfort of WaterLase with the fastest, most versatile laser in the world… the revolution is finally here!



Federico Pignatelli
Chairman & CEO
BIOLASE Technology, Inc.

*NO SHOT, NO DRILL, NO PAIN…™**

CUTTING SPEED EQUAL TO THE HIGH-SPEED AND FASTER THAN ANY OTHER LASER…

INTUITIVE…

*NO CROSS CONTAMINATION RISK LIKE THE DRILL…**

SOUND LIKE ANY LASER YOU'VE EVER SEEN?

WHAT'S INSIDE

*"No shot, no drill, no pain" is not a claim of clinical efficacy, but a goal of WaterLase technology. Because each patient's perception of discomfort during treatment is based on individual sensitivity to pain, treatment history, and the procedure being performed, not all patients can be treated without anesthetic. However, dentists using WaterLase to perform typical cavity preparations report not using anesthetic in the majority of cases.

**Studies show that sterilization of used burs and endodontic files is less than 100% effective. Single-use WaterLase tips avoid this cross contamination risk.

"WaterLase technology has completely transformed the dental experience for my patients and for me. Now BIOLASE has once again transformed laser dentistry! The WaterLase iPlus™ is a true breakthrough in speed, ease of use and productivity!"

– Dr. Stewart Rosenberg
Laurel MD

"WaterLase has always delivered the best patient comfort and clinical results. Now it's also number one in speed, simplicity and return on investment."

– Dr. William Chen
Granite City IL

"Every day my patients and I get great pleasure from the efficiency, aesthetics, comfort and safety of WaterLase technology. I cannot imagine how would I work without it in my everyday practice."

– Dr. Olga Risovannaya Krasnodar Russia

WHAT DO YOUR PATIENTS REALLY THINK ABOUT YOU?

Actually, they love you –they really do – everything from your comfortable chair, to how you really care about their teeth, to that squeaky tooth feeling after seeing your hygienists. They love it all… except your drill and needles.

The WaterLase will give you a truly different alternative to the traditional tools you're been using to treat patients. WaterLase technology can completely alter your outlook on your profession and how patients feel about you. **Unlike drills and needles, patients love WaterLase.**

97% of WaterLase patients are very likely to recommend it to their friends and family members.* You can be the advanced WaterLase dentist that patients are recommending. Once they know you care enough to offer WaterLase treatment, they become walking advertisements for your practice.

Adding WaterLase technology to your life gives your patients the option to love everything about you.

"The WaterLase iPlus™ has changed my patients' perception from fear and pain to comfort and appreciation."

– Dr. Howard Golan Manhasset NY

"The Waterlase has made going to the office more fun–for our patients and for our entire dental team."

– Dr. Fred S. Margolis Pediatric Dentist Buffalo Grove IL

BE LOVED BY YOUR PATIENTS... USE THE WATERLASE!

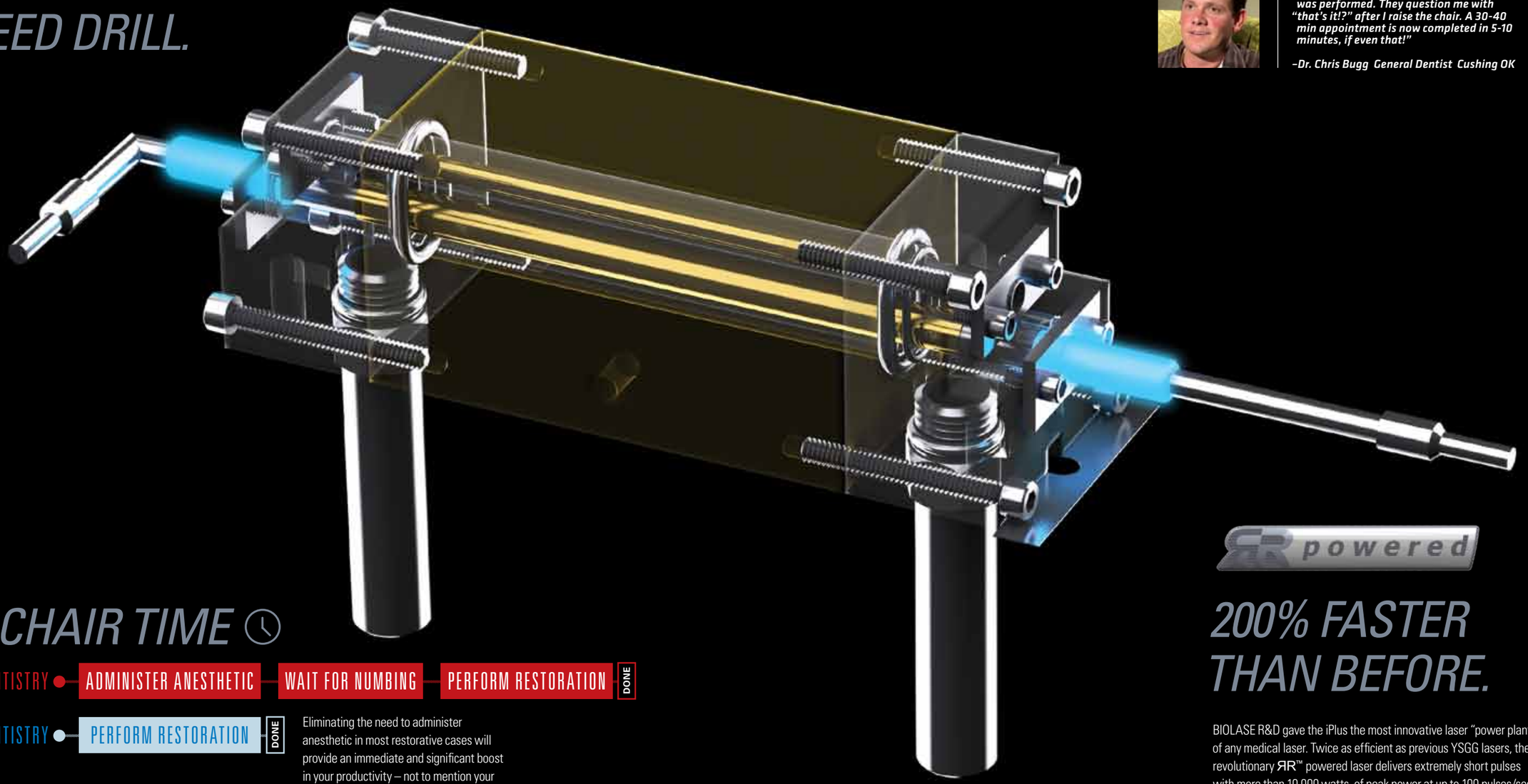
*BIOLASE Brand Development Research: Final Report Rev. Aug. 2005

FASTER THAN THE HIGH SPEED DRILL.

Productivity in dentistry requires tools that let you work fast. BIOLASE R&D set out to beat the current standard in cutting speed, the high speed drill. In tissue removal speed and overall chair time, iPlus wins.

THE BEST HARD TISSUE LASER ON THE MARKET *

The YSGG iPlus provides significantly better coagulation of soft tissue than erbium YAG lasers 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.



PATIENT CHAIR TIME

TRADITIONAL DENTISTRY — ADMINISTER ANESTHETIC — WAIT FOR NUMBING — PERFORM RESTORATION — DONE

MODERN WATERLASE DENTISTRY — PERFORM RESTORATION — DONE

Eliminating the need to administer anesthetic in most restorative cases will provide an immediate and significant boost in your productivity – not to mention your popularity with patients.

"Every single patient is amazed at how fast, easy, and pain-free the WaterLase procedure was performed. They question me with "that's it!?" after I raise the chair. A 30-40 min appointment is now completed in 5-10 minutes, if even that!"

–Dr. Chris Bugg General Dentist Cushing OK

"Fast and painless! The procedure was over before I'd even made myself comfortable in the dental chair!"

–J.R. WaterLase Patient Somerset MA

*2011 Townie Choice Award for Best Hard Tissue Laser

"With double the energy and half the pulse, I can cut posterior teeth in only a minute or two while optimizing patient comfort and reducing anxiety."

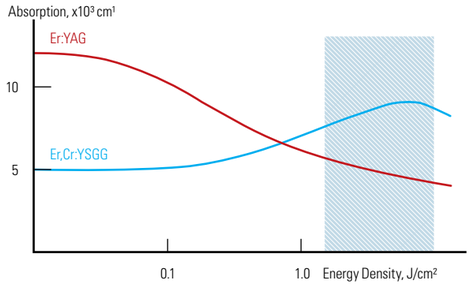
– Dr. Bill Greider Fort Meyers FL

powered

200% FASTER THAN BEFORE.

BIOLASE R&D gave the iPlus the most innovative laser "power plant" of any medical laser. Twice as efficient as previous YSGG lasers, the revolutionary ЯR™ powered laser delivers extremely short pulses with more than 10,000 watts of peak power at up to 100 pulses/sec.

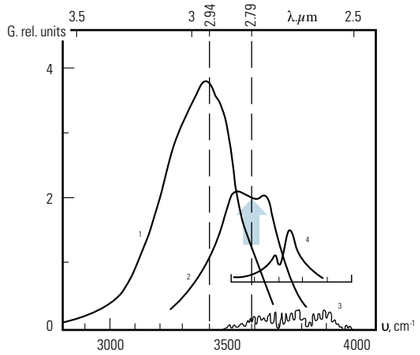
CUTTING SPEED EQUAL TO THE DREADED HIGH-SPEED DRILL AND FASTER THAN ANY OTHER LASER



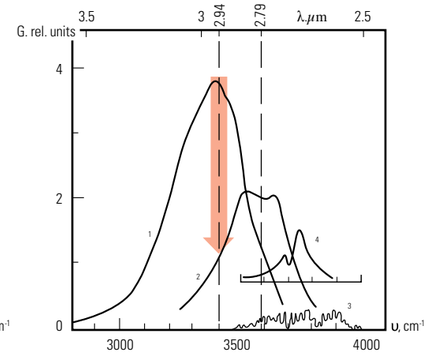
Both the iPlus™ Er,Cr:YSGG and erbium YAG lasers cut by energizing water molecules within the target tissue and from the spray on the tissue surface. Laser energy rapidly increases the temperature of the water, pressurizing and breaking apart the crystalline enamel prisms within hard tissue.

The iPlus cuts dentin and enamel better than erbium lasers, because (as the graphs here show) when temperature increases during excitation of water by the laser pulse, less Er:YAG laser energy is absorbed and more YSGG energy is absorbed. The result is that YSGG cuts faster than Er:YAG.

The science may be complex, but the goal is simple – to create a painless, anxiety-free and convenient experience for your patients. Imagine an entire new generation of patients who never worry about coming to the dentist.

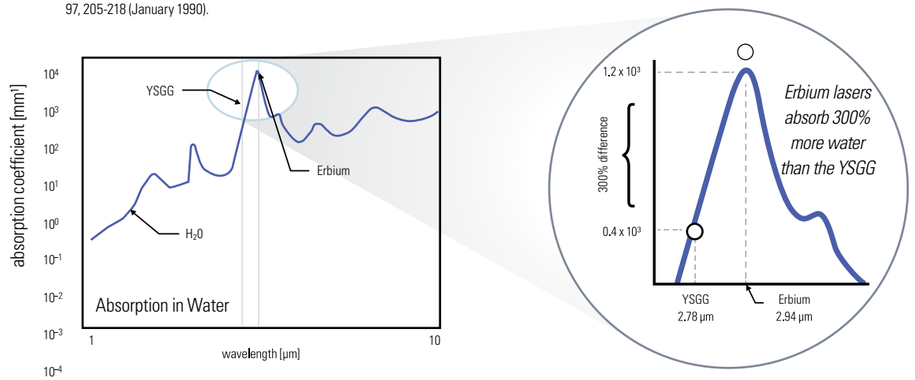


With water excitation, absorption at 2.79 µm increases from 5,000 to 8,000 cm⁻¹



With water excitation, absorption at 2.94 µm decreases from 12,000 down to 4,000 cm⁻¹

K.L. Vodop'yanov, Bleaching of water by intense light at the maximum of the l~3mm absorption band, Zh. Exp. Teor. Fiz, 97, 205-218 (January 1990).



Ashley J. Welch et al., Optical-Thermal Response of Laser Irradiated Tissue, Plenum, 1996

"Since becoming a laser dentist in 2000, my practice has grown tremendously, because of the more gentle approach using laser-assisted techniques. From soft tissue management, to laser-assisted root canal therapy, and minimally invasive restorative techniques, patients appreciate the efficiency and excellent results provided by utilizing laser therapy. Isn't that what it is all about, providing our patients with the best that dentistry has to offer?"

– Dr. Bruce Cassis Fayatteville WV

"I have owned and currently own all of BIOLASE WaterLase Lasers and my iPlus is by far the single most advanced laser ever produced in terms of cutting speed, not only for teeth but soft tissue and bone as well. I never thought it was ever going to be that different from the last WaterLase MD that I have but it is!"

– Dr. Steven Spitz Boston MA

THE MOST RAPID ADVANCEMENT OF YOUR LASER KNOWLEDGE AND SKILLS.

CERTIFICATION TRAINING COURSES
Combining lecture, hands-on exercises and live patient procedures can be included with the purchase of each iPlus™ laser system. As you hone your skills, move on to Master Level courses offered frequently in locations worldwide.

LASER STUDY CLUBS
BIOLASE organizes Laser Study Clubs wherever WaterLase owners want to further their learning by inviting guest speakers, sharing techniques and mentoring new laser owners.

BIOLASE IS A WORLD LEADER IN LASER EDUCATION AND TRAINING THROUGH THE WORLD CLINICAL LASER INSTITUTE
With more than 14,000 members worldwide it is the largest dental and medical laser education organization in the world. WCLI symposiums are held frequently around the world.

"Being a laser dentist has opened many doors for me. Through WCLI, study clubs and laser courses, I have met many wonderful people and been able to expand my contacts within dentistry."

– Dr. Karen Foster
Pediatric Dentist Aurora CO

Dr. Sean Whalen, Dr. Better Barr, Dr. Donald J. Kleier, Dr. Nelle V. Barr

"We continue to learn more about the lasers and use them more and more, because when we go to CE courses and when we go to the Laser Study Club in Denver, we're encouraged by other practitioners in the area to increase our applications of the lasers."

– Dr. Betty Barr, Pediatric Dentist, Westminster CO

LECTURE AT WCLI SYMPOSIUMS WORLDWIDE

ATTAIN WCLI MASTERSHIP

PUBLISH CLINICAL ARTICLE

PRESENT AT LOCAL BIOLASE STUDY CLUB

PERFORM LIVE PROCEDURE FOR PROSPECTS

MASTER LEVEL COURSE

ATTAIN WCLI FELLOWSHIP

MENTOR NEW WATERLASE DENTIST

ATTEND LOCAL BIOLASE STUDY CLUB

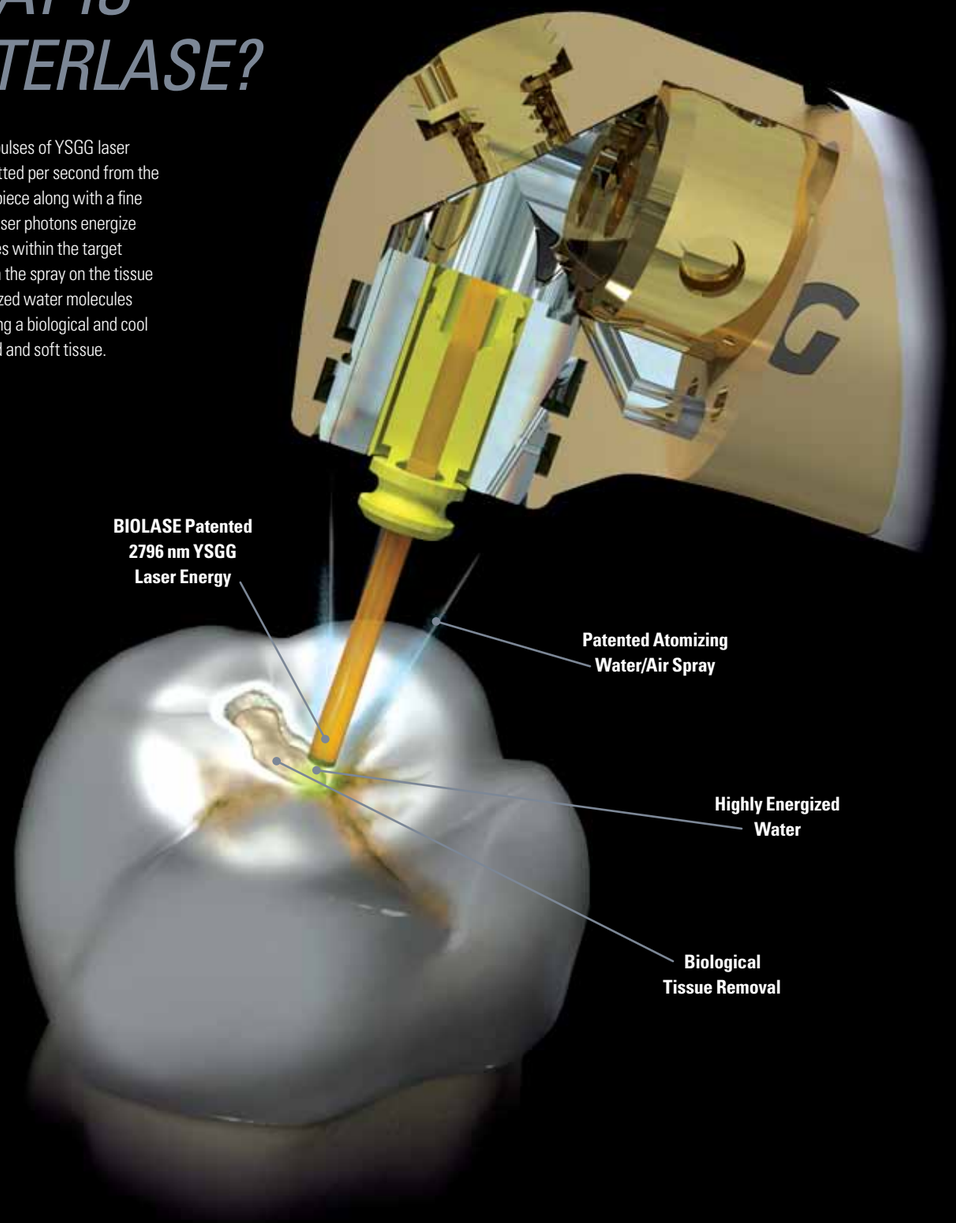
ATTEND WCLI SYMPOSIUM

CERTIFICATION TRAINING COURSE

TRAIN YOUR WAY TO THE TOP

WHAT IS WATERLASE?

From 5 to 100 pulses of YSGG laser energy are emitted per second from the tip of the handpiece along with a fine water spray. Laser photons energize water molecules within the target tissue and from the spray on the tissue surface. Energized water molecules vaporize, causing a biological and cool ablation of hard and soft tissue.



WATERLASE ELIMINATES PAIN IN MOST CASES.

It is widely accepted that tooth pain is caused when a stimulus applied to dentin is transmitted to nerves inside the tooth through fluid in dentinal tubules.

The heat, vibration and pressure of the drill trigger pain impulses through this fluid. According to one mechanism related to pain transmission that has been reported in the literature, WaterLase may prevent pain transmission – without anesthetic or needles – by dehydrating tubule fluid, leaving insoluble salts in the tubule that block pain transmission to the nerves.

WaterLase may also eliminate pain by the same mechanism of action currently accepted for how Low Level Laser Therapy desensitizes – by interfering with nerve cell membrane polarity to block transmission of pain stimuli.

"It's a fact – I will never consider going to a non-WaterLase dentist again. The laser procedure was fast, easy, painless, and the best thing that's ever happened to my teeth!"

–A. M. WaterLase Patient Houston TX

WATERLASE ELIMINATES RISK OF CROSS OF CONTAMINATION.*

The potential for cross contamination between patients in the dental operatory is a real and widely documented risk. Burs and files are manufactured and FDA approved only for single use on patients. Research shows that burs and endodontic files cannot be properly sterilized for re-use. Patients are becoming knowledgeable about the dangers of cross contamination. Using WaterLase as directed can greatly reduce or even eliminate this risk. Don't be left behind. Project yourself into the future of advanced dental care.

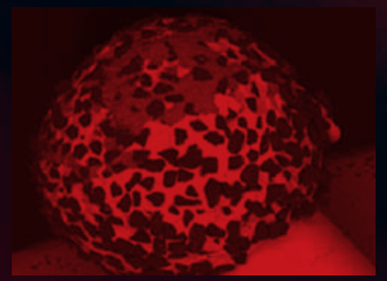
Flawless WaterLase Tips

WATERLASE IS A CLEANER, SAFER DENTAL INSTRUMENT.

- Flawless tip surfaces do not harbor debris or bacteria like abrasive surface of burs or files
- The WaterLase YSGG laser is FDA INDICATED FOR DISINFECTION of the root canal after instrumentation
- Works without contact to tooth or tissue
- Single-use, disposable tips Eliminates accidental "sticks" possible while handling contaminated burs

BURS & ENDO FILES PRESENT A HIGH CROSS CONTAMINATION RISK.

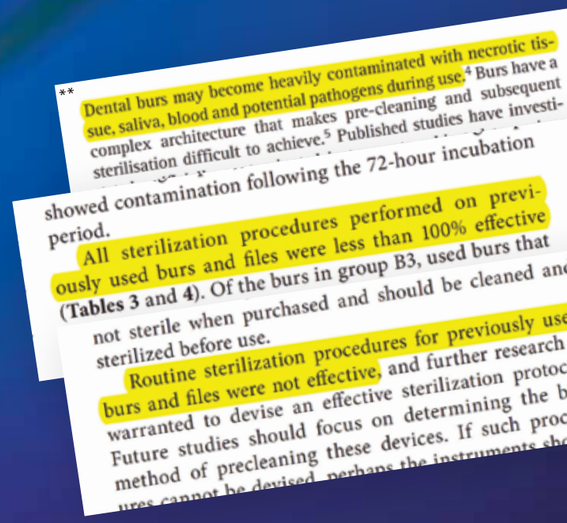
- 15-30% of "sterilized" burs and up to 76% of "sterilized" endodontic files carry pathogenic micro-organisms
- Complex bur surfaces are difficult to clean
- Autoclaving fails to completely decontaminate burs



Typical "dirty" drill bur

BACTERIA FOUND ON "STERILIZED" BURRS & ENDODONTIC FILES

- Streptococcus
  - *S. mutans*
  - *S. sanguis*
  - *S. milleri*
  - *Anaerobic streptococci*
- Lactobacillus spp.
- Gemella
  - *G. morbillorum*
- Staphylococcus spp.
  - *Coagulase negative staphylococci*
- Corynebacteria spp.
- Actinomyces spp.
- Aerococcus viridans
- Enterococcus avium
- Stomatococcus mucillagenous
- Black pigmented anaerobes
- Prevotella spp.
- Porphyromonas spp.
- Veillonella spp.
- Candida
  - *C. albicans*



Dental burs may become heavily contaminated with necrotic tissue, saliva, blood and potential pathogens during use.[4] Burs have a complex architecture that makes pre-cleaning and subsequent sterilisation difficult to achieve.[5] Published studies have investi-

showed contamination following the 72-hour incubation period.

All sterilization procedures performed on previously used burs and files were less than 100% effective (**Tables 3** and **4**). Of the burs in group B3, used burs that not sterile when purchased and should be cleaned and sterilized before use.

Routine sterilization procedures for previously used burs and files were not effective, and further research warranted to devise an effective sterilization protoc Future studies should focus on determining the b method of precleaning these devices. If such proc ures cannot be devised, perhaps the instruments sh

*When comparing WaterLase single-use tips to re-use of burs with the high speed drill.

**C. L. Whitworth, M. V. Martin, M. Gallagher and H. V. Worthington, A comparison of decontamination methods used for dental burs, British Dental Journal Volume 197 No. 10 November 27 2004. J Can Dent Assoc. 2009 Feb;75(1):39. Dental burs and endodontic files: are routine sterilization procedures effective? Morrison A, Conrod S. Dalhousie University, Halifax, Nova Scotia. Republished in: Tex Dent J. 2010 Mar;127(3):295-300.

THE iPLUS GRAPHICAL USER INTERFACE AND BUILT-IN INTELLIGENCE OPEN A NEW WORLD OF CLINICAL CAPABILITIES.

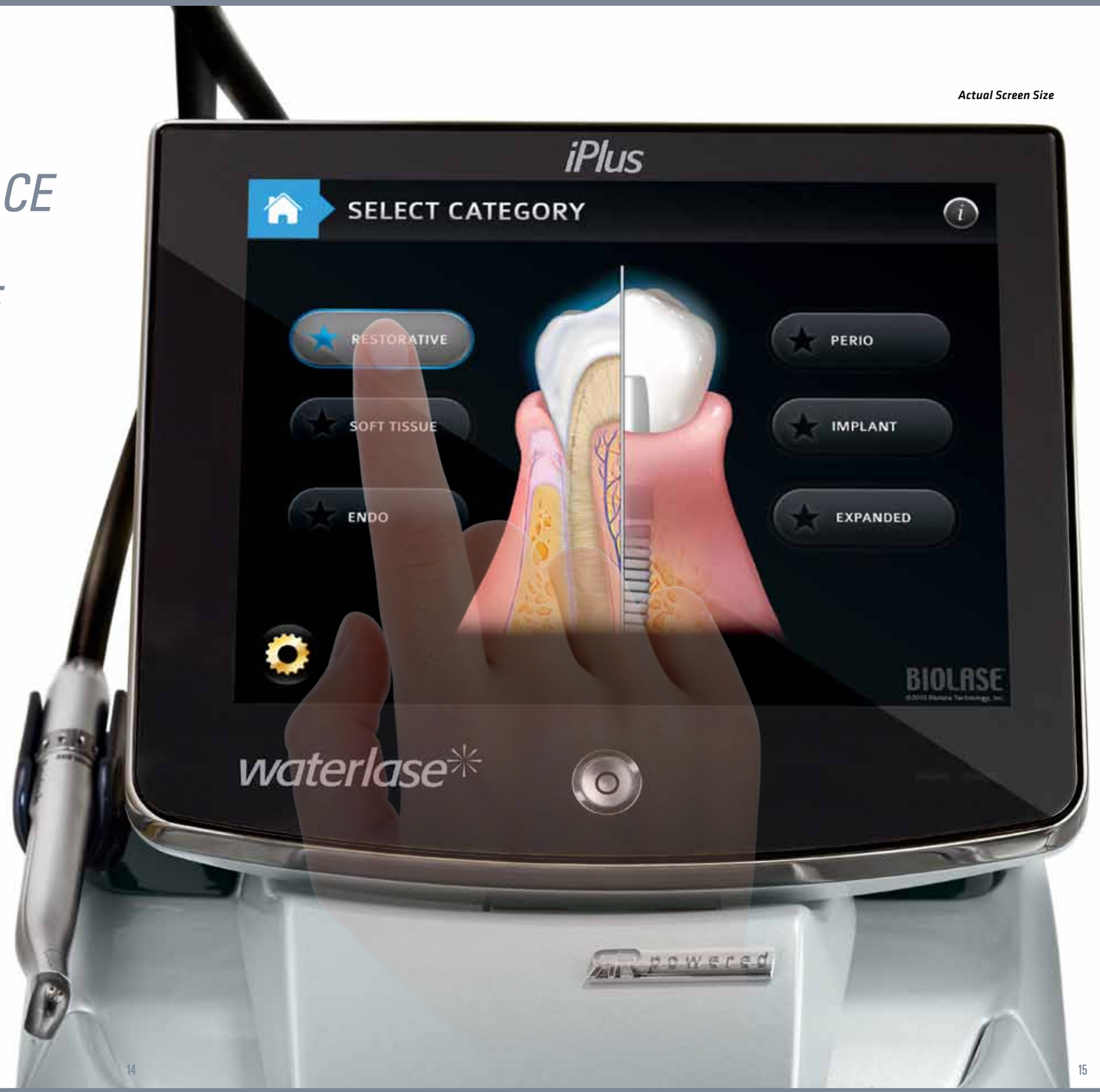
The WaterLase iPlus™ intuitive graphical user interface puts dozens of laser-assisted clinical procedures at your finger tips – no settings to program, no tip guides to consult. Everything is pre-programmed and simple to use.

Plus it's fast. A few touches of the screen and the iPlus is ready to go to work in seconds, which is great for boosting your productivity.

"The WaterLase has allowed me to enhance my practice of 'bread and butter dentistry', perform procedures that I never would have done as a general dentist, and most importantly, keeps my dental spirit fresh and excited on a daily basis."

– Dr. Christina Do
General Dentist Costa Mesa CA

Actual Screen Size



QUICK TO LEARN. 56 PROCEDURES AS EASY AS…

1

Select "Restorative" from the first screen

2

Choose "Class I" from the next screen

3

Specify any other options such as patient sensitivity or bond strength

GO!

SUBGINGIVAL CLASS V CAVITY PREPARATION

PRE-OP | INTRA-OP | IMMEDIATE POST-OP

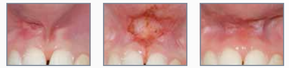
CLASS I CAVITY PREPARATION

PRE-OP | INTRA-OP | IMMEDIATE POST-OP

WORN INCISAL EDGES

PRE-OP | INTRA-OP | IMMEDIATE POST-OP

PRE-OP | IMMEDIATE POST-OP | POST-OP



PRE-OP | INTRA-OP | IMMEDIATE POST-OP

PRE-OP

IMMEDIATE POST-OP

IMMEDIATE POST-OP

IMMEDIATE POST-OP

"WaterLase may be the missing link that enables us to kill bacteria deep within the dentinal tubules. In our practice we no longer aim to "entomb" bacteria but rather to eliminate bacteria."

– Dr. Justin Kolnick
Endodontist, White Plains NY

"The WaterLase is our work horse. I cannot overstate the advantage of their use in preparations on primary teeth without local anesthesia. This feature alone transformed my enthusiasm for pediatric dentistry."

– Dr. Betty Barr
Pediatric Dentist, Westminster CO

CLASS I
CLASS II
CLASS III, IV, V

GINGIVAL RECONTOURING

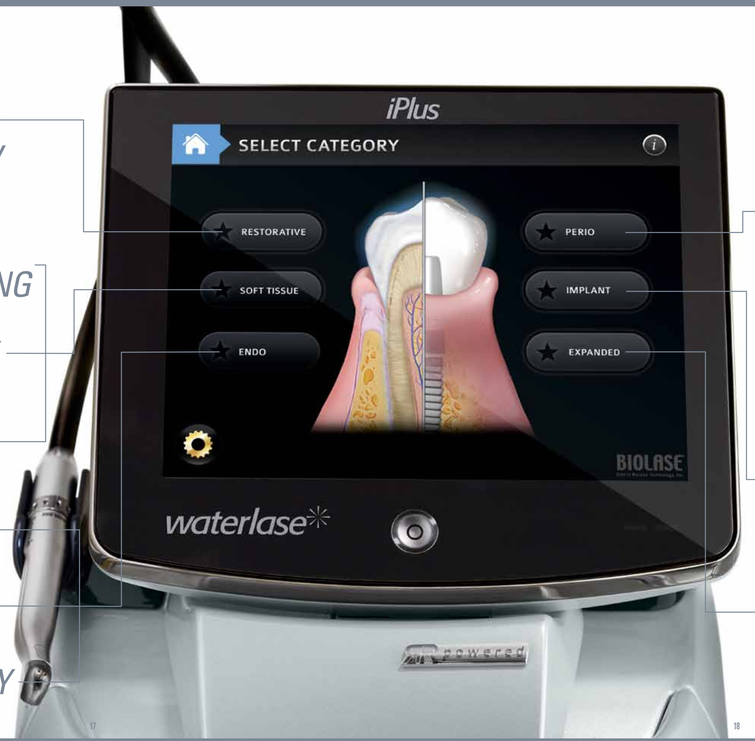
FRENECTOMY

BIOPSY

ROOT CANAL THERAPY

PULPOTOMY

APICOECTOMY



POCKET THERAPY OPEN OR CLOSED FLAP

OSSEOUS CROWN LENGTHENING OPEN/CLOSED

IMPLANT RECOVERY

TROUGHING

LASER BANDAGE

SITE SPECIFIC PERIO/LASER CURETTAGE

PRE-OP | INTRA-OP | POST-OP

INTRA-OP

POSTERIOR OSSEOUS CROWN LENGTHENING

PRE-OP | INTRA-OP | POST-OP

ANTERIOR OSSEOUS CROWN LENGTHENING

PRE-OP | INTRA-OP | POST-OP

IMPLANT EMERGENCE PROFILE

IMMEDIATE POST-OP

PRE-OP | INTRA-OP | POST-OP

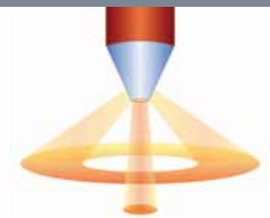
"With my 7th year of using a WaterLase, I have long realized that I could not exist in dentistry without it. I presently use it in all phases of dentistry – crown and bridge, fillings, endodontics, periodontics, oral surgery, implantology, and orthodontics. I changed the name of my clinic to Aesthetic Laser Dentistry because of this one device called the WaterLase."

– Dr. John Hendy
Grants Pass OR

iPLUS GIVES YOU A HIGHLY EFFECTIVE NEW TREATMENT FOR PERIODONTAL DISEASE.

Deep Pocket Therapy (DPT) with New Attachment™ using the WaterLase iPlus laser 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, and subgingival calculus removal.

Published data indicate that YSGG minimally invasive surgical periodontal laser therapy using the WaterLase "led to significant improvements" in bleeding on probing, probing depth, and "appeared to be advantageous when compared to SRP alone, due to more efficient attachment level restoration."



Our patented Radial Firing Perio Tip (RFPT) features a unique design that precisely tapers the end of the tip to deliver most of its energy to the side of the tip and only a portion from the end of the tip, protecting the apex of the canal.

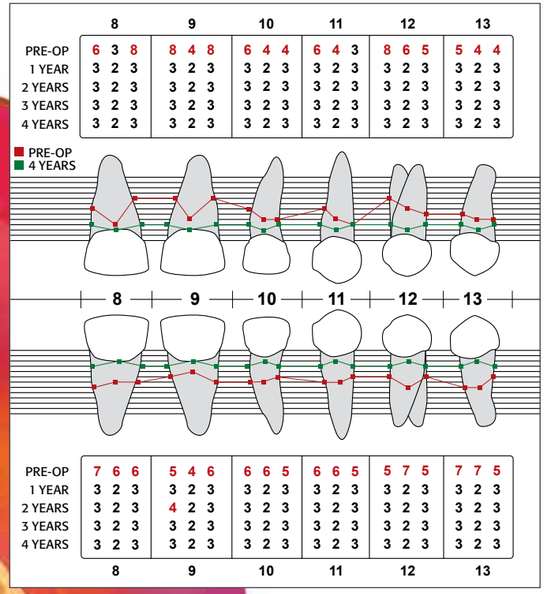
"As a Periodontist, I have been waiting to buy a laser until there was a reliable one that could address hard and soft tissues safely and efficiently. The WaterLase has now become my "instrument" of choice in many procedures, including ones that I didn't think could or should be performed with a laser."

– Beth Gold Periodontist Marysville WA

PERIODONTAL TREATMENT USING THE ER,CR:YSGG LASER.

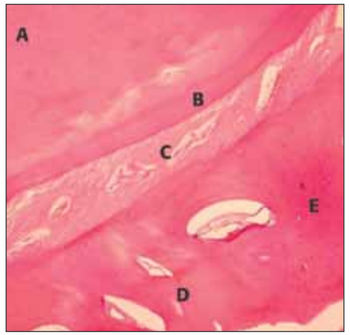
CASE 1
Example of Minimally Invasive Deep Pocket Therapy utilizing the Waterlase MD
Courtesy of Bret Dyer, DDS, MS, Private Periodontal Practice, Sugar Land, TX

	8	9	10	11	12	13
PRE-OP	6 3 8	8 4 8	6 4 4	6 4 3	8 6 5	5 4 4
1 YEAR	3 2 3	3 2 3	3 2 3	3 2 3	3 2 3	3 2 3
2 YEARS	3 2 3	3 2 3	3 2 3	3 2 3	3 2 3	3 2 3
3 YEARS	3 2 3	3 2 3	3 2 3	3 2 3	3 2 3	3 2 3
4 YEARS	3 2 3	3 2 3	3 2 3	3 2 3	3 2 3	3 2 3



	8	9	10	11	12	13
PRE-OP	7 6 6	5 4 6	6 6 5	6 6 5	5 7 5	7 7 5
1 YEAR	3 2 3	3 2 3	3 2 3	3 2 3	3 2 3	3 2 3
2 YEARS	3 2 3	4 2 3	3 2 3	3 2 3	3 2 3	3 2 3
3 YEARS	3 2 3	3 2 3	3 2 3	3 2 3	3 2 3	3 2 3
4 YEARS	3 2 3	3 2 3	3 2 3	3 2 3	3 2 3	3 2 3

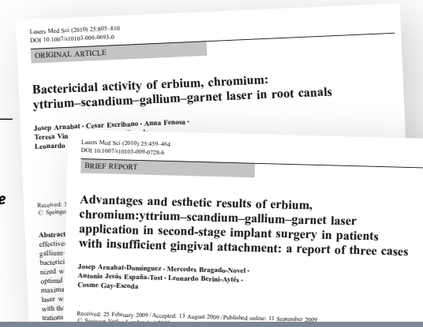
CASE 2
Post-op Histology of a Site-specific Perio (SSP) Treatment utilizing the Er,Cr:YSGG Waterlase MD laser. Courtesy of Andreas Moritz, MD, DDS, PhD, Dental School, Medical University of Vienna



A Root Surface
B Cementum
C Periodontal Ligament
D Old Bone
E New Bone

"This not only enhances results in the hands of a periodontist using the WaterLase for regenerative procedures, 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



Lasers Med Sci (2010) 25:805–810
DOI 10.1007/s10103-009-0693-0

ORIGINAL ARTICLE

Bactericidal activity of erbium, chromium: yttrium–scandium–gallium–garnet laser in root canals

Josep Arnabat · Cesar Escribano · Anna Fenosa ·

Lasers Med Sci (2010) 25:459–464
DOI 10.1007/s10103-009-0728-6

BRIEF REPORT

Advantages and esthetic results of erbium, chromium:yttrium–scandium–gallium–garnet laser application in second-stage implant surgery in patients with insufficient gingival attachment: a report of three cases

Josep Arnabat-Domínguez · Mercedes Bragado-Novel · Antonio Jesús España-Tost · Leonardo Berini-Aytés · Cosme Gay-Escoda

Received: 25 February 2009 / Accepted: 13 August 2009 / Published online: 11 September 2009

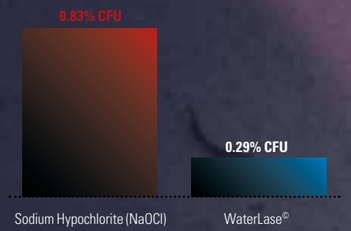
iPLUS PROVIDES SUPERIOR DISINFECTION OF THE ROOT CANAL.

The smear layer remaining after rotary or hand instrumentation not only contains infected tissue, but can seal infection within dentinal tubules. Scanning Electron Microscopy shows how treatment with WaterLase MD™ Radial Firing Tips leaves canal walls free of smear layer, and opens dental tubules, allowing YSGG laser energy to penetrate and destroy bacteria.

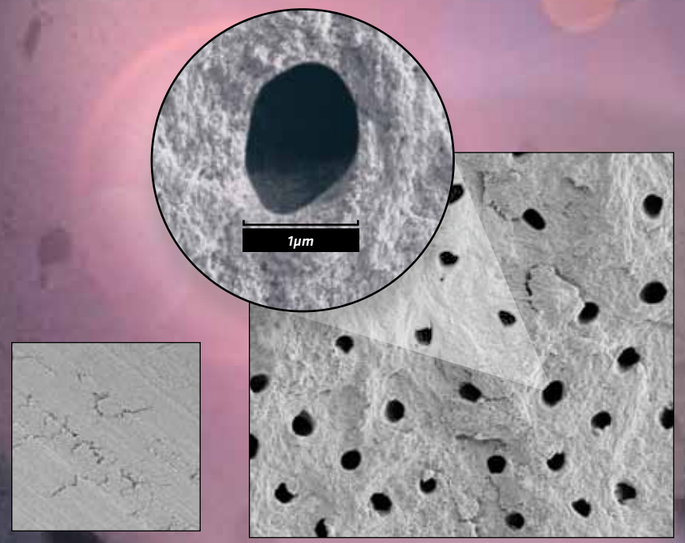
EFFECTIVE ON THE HIGHLY RESISTANT ENTEROCOCCUS FAECALIS–TO REDUCE RETREATMENT RISK.

Why do treatments fail even when all canals are located and cleaning and enlargement is successful? Research has shown that most root canal treatment failures are caused by persistent or secondary intraradicular infections, with E. faecalis, the most prevalent species. WaterLase MD™ YSGG treatment may reduce the risk of retreatment.

Mean Bacteria CFU's (Colony Forming Units) of E. Faecalis Remaining After Treatment as Percentage of Positive Control Mean

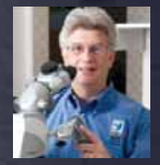


WaterLase© reduced E. Faecalis 2.86 times more effectively than NaOCl.
The smaller the mean percentage, the greater the reduction in E. Faecalis.



Canal wall after instrumentation only dentinal tubules covered and blocked by smear layer

Canal wall after EndoLase RFT with clean, open tubules



"WaterLase RFT has revolutionized our practice of endodontics. For the first time we are within reach of sterilizing an infected root canal system – unheard of in the specialty of endodontics!

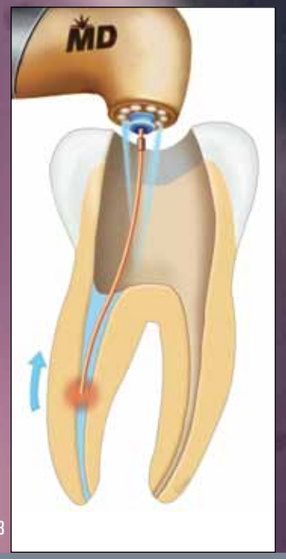
- Dr. Justin Kolnick
Endodontist
White Plains NY

ENDOLASE ROOT CANAL THERAPY IS SIMPLE, EFFICIENT AND EFFECTIVE.

STEP 1
Access Preparation

STEP 2
Conventional Instrumentation

STEP 3
Cleaning & Enlargement



STEP 4
Disinfection

ERGONOMICALLY DESIGNED FOR INFINITE PRODUCTIVITY.

The WaterLase iPlus has the lightest, most flexible trunk fiber ever. 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 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.

The WaterLase Contra-angle Handpiece is the sleekest and most ergonomic of any dental laser.

All BIOLASE Gold and Turbo handpieces are compatible with the iPlus.

"I have been ecstatically pleased since taking ownership of the new WaterLase iPlus. Its versatility is fabulous and its potential is unchecked in my opinion."

– Dr. Lon Lawrenz Tempe AZ

THE WIDEST SELECTION OF TIPS, ACCESSORIES AND UPGRADES OF ANY DENTAL LASER – FOR THE GREATEST VERSATILITY.

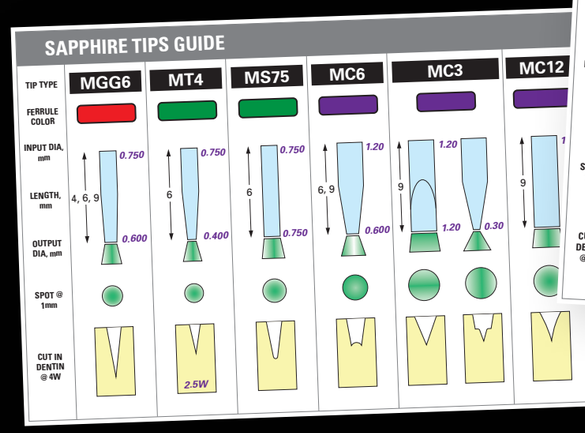
The WaterLase iPlus offers the widest variety of tips of any dental laser, to give you precisely the results you want in any procedure. Each tip is specially engineered and clinically tested to deliver the optimal laser energy to the treatment site. BIOLASE is continually designing new, ever more effective tips to meet the needs of our owners and improve the performance of our laser systems.

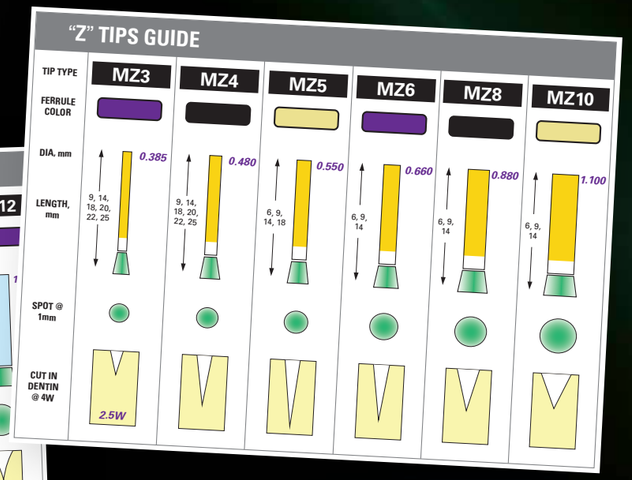
"It is hard to imagine where my practice would be without my WaterLase. In the past 18 months we have continued to add techniques and procedures with the laser that have improved patient comfort and have delivered treatment that before was hardly imaginable."

– Dr. Todd Morton, Ballwin MO

WATERLASE TIPS ARE DESIGNED TO CUT FASTER

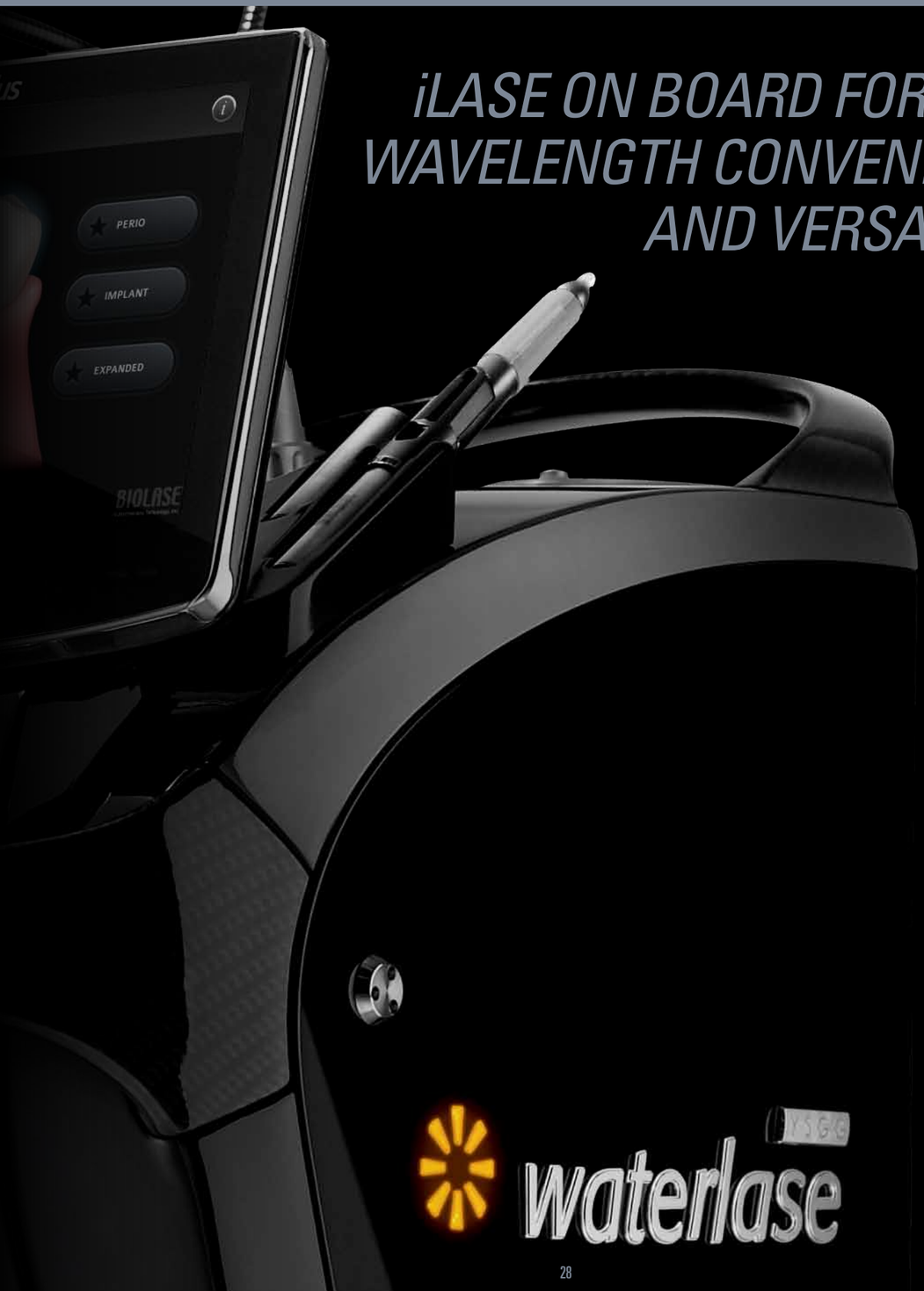
- With higher power levels, the laser can be spread over a wider surface area
- Result is faster cutting in width, and consistent depth
- Laser cutting technique & appearance resembles cutting with a high-speed drill, without lateral cutting





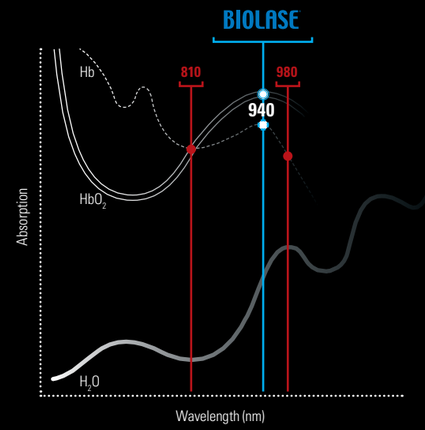
INSTANT, EASY ACCESS TO ALL YOUR IPLUS NEEDS

You will find a complete selection of WaterLase iPlus laser system tips, accessories, upgrades, extended warranties and more – available 24/7 at the BIOLASEstore.com.



iLASE ON BOARD FOR DUAL WAVELENGTH CONVENIENCE AND VERSATILITY.

The iPlus is a superior soft tissue laser. Even so, sometimes it's just more convenient to pick up the completely wireless iLase diode soft tissue when you just need to perform a quick, minor soft tissue procedure.



The first totally wireless dental laser, the iLase uses finger switch activation instead of a foot pedal.

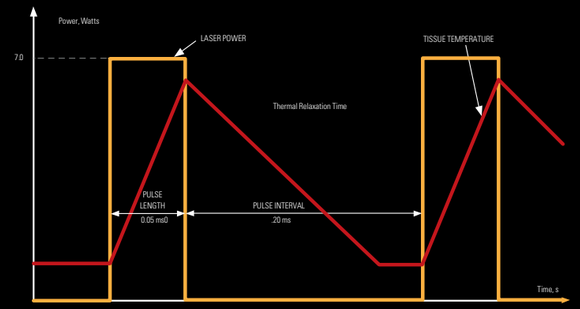
With 5W of peak power, is great for basic soft tissue procedures. For optimum efficiency, recommended values for power and pulse mode are factory installed for 10 common soft tissue procedures.

WHY 940NM IS SUPERIOR TO OTHER DIODE WAVELENGTHS

While all diode lasers use heat to cut, many increase tissue temperature excessively, causing patient discomfort. The 940 nm wavelength of the optional iLase laser, developed exclusively for dentistry by BIOLASE, is better absorbed by hemoglobin and oxyhemoglobin than other wavelengths, so the iLase cuts faster at lower power with less heat, for greater patient comfort.

EXCLUSIVE COMFORTPULSE™ FOR OPTIMUM PATIENT COMFORT AND SPEED

BIOLASE soft-tissue lasers keep patients more comfortable a second unique way. An exclusive BIOLASE feature called ComfortPulse™ lets you significantly reduce the amount of time the laser is actually cutting, to avoid pain-inducing heat build-up at the surgical site. This unique combination of features means you can perform most soft-tissue procedures with the iLase using topical anesthetic only.

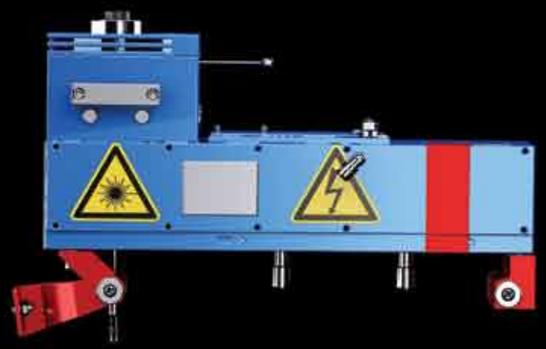


EzTips™

BIOLASE soft-tissue lasers offer the most precise control of tissue cutting for different procedures and tissue biotypes, with the widest selection of tip lengths and diameters. Bendable EzTips provide better access to all areas, and are single-use and disposable for quick, convenient treatment, and reduced risk of cross contamination. PURCHASE ezLase and iLase diode lasers online at www.BIOLASEStore.com

Actual Size

THE TECHNOLOGY BEHIND iPLUS PRECISION, PERFORMANCE AND RELIABILITY.



Revolutionary patented ЯR™ Laser Pump Chamber technology – 3 years in development – doubles pulse energy and pulse rate and is designed for increased reliability and lifetime

Faster microprocessor, Window's based operating system, and software

Lightest, most flexible trunk fiber provides unmatched handpiece control and access, reduces hand fatigue

Patented exclusive laser-based water level sensor automatically detects "full", "low level", "empty", and "no bottle" water states

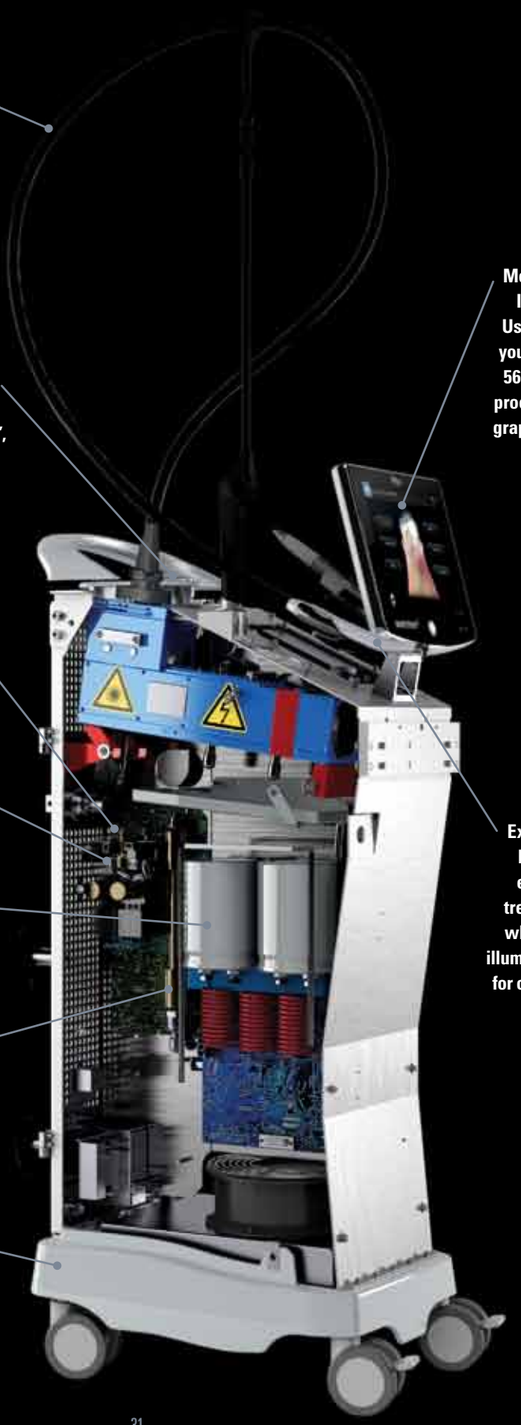
Dual-stage centrifugal air filtration system removes all oil and moisture from incoming air used in air-water spray

High frequency water control valve maintains precise air-water mixture

Patented BIOLASE exclusive dual power supply supports separate hard-tissue and soft tissue cutting modes

Air dryer helps maintain 100% laser efficiency even in tropical high humidity environments

Ultra high strength aluminum-magnesium alloy chassis manufactured by same foundry as top-of-the-line Mercedes Benz engine blocks



Most Advanced and Intelligent Laser User Interface gives you instant access to 56 pre-programmed procedures via a large graphical touchscreen

Exclusive Contra-angle Handpiece, provides excellent visibility at treatment site with ultra white, shadow-free LED illumination, and rotates 360° for optimal access, comfort

DUAL WAVELENGTH WATERLASE iPLUS™ ALL TISSUE LASER SYSTEM OPTIONS AND SPECIFICATIONS.

MAKE A FASHION STATEMENT WITH YOUR iPLUS

It's fashionable to be high tech! Patients recognize and value your investment in technology that improves their treatment experience and results. A WaterLase iPlus let's you make a bold statement that patients can't miss.

RACING RED

CARBON

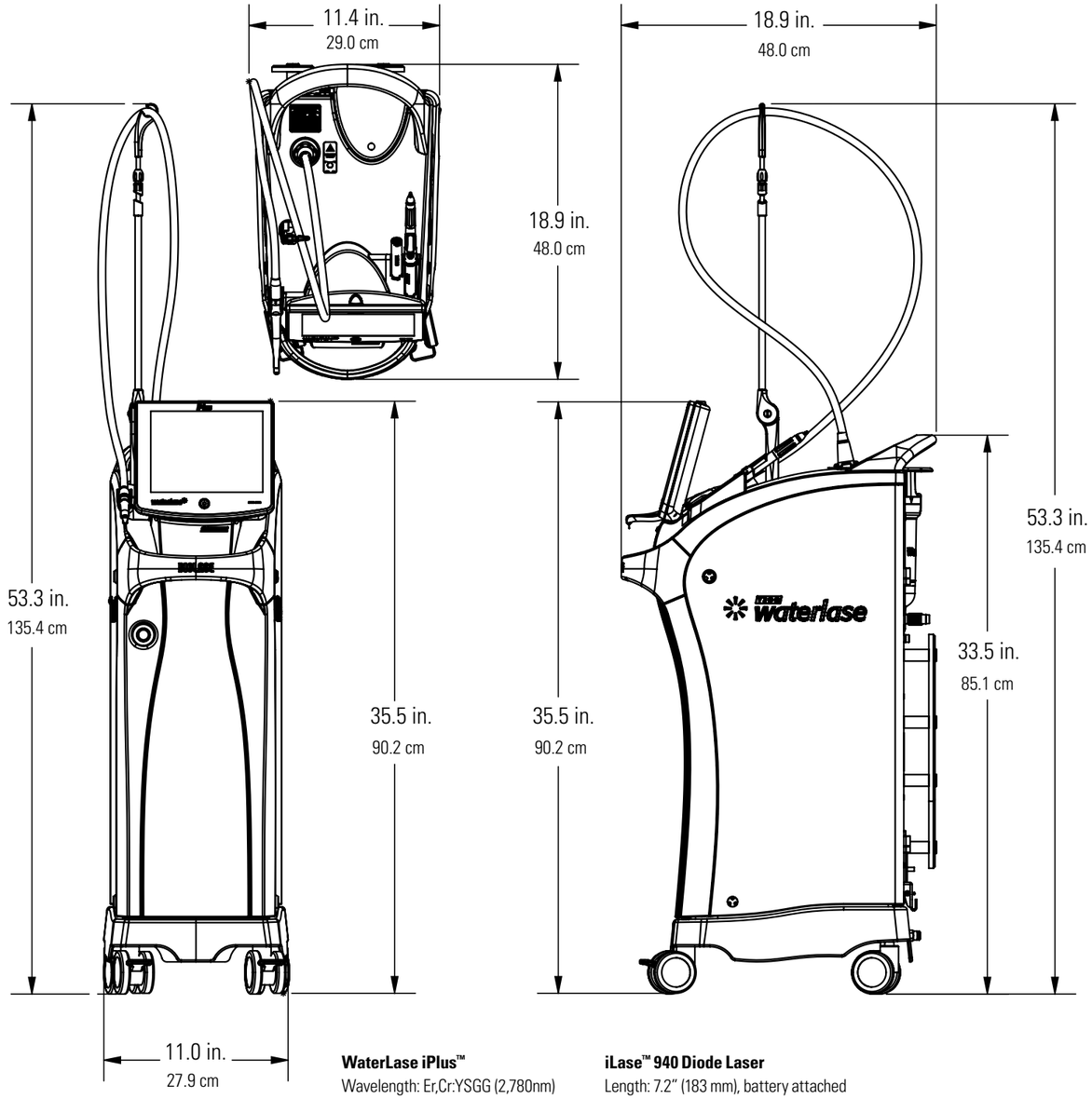
ECO GREEN

BURNT ORANGE

MIDNIGHT

PEARL

PLATINUM



Specifications subject to change without notice.

WaterLase iPlus™
Wavelength: Er,Cr:YSGG (2,780nm)
Diode (940nm)
iLase™ Charging Slots: 2
Max Output Power: 10W
Max Pulse Energy: 600 mJ
Pulse Rep Rate: 5 to 100 Hz
Pulse Duration: H: 60 µsec S:700 µsec

iLase™ 940 Diode Laser
Length: 7.2" (183 mm), battery attached
Diameter: 0.74" (18.7 mm)
Weight: 0.22 lb (98 g), with battery attached
Wavelength: 940 ± 15 nm
Max Peak Output Power: 5 W
Max Continuous Wave Output Power: 3 W
Three Power Modes: Continuous Wave, ComfortPulse™ 1, ComfortPulse™ 2
Battery Power: Single, rechargeable Li-Ion assembly; 3.7 VDC, 650 mA-h
Presets: 10 factory-loaded & user-customizable, 2 extra user-customizable

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Revolutionizing Surgery in Dentistry and Medicine

BIOLASE Technology is revolutionizing surgery in dentistry and medicine, specializing in the development, manufacturing and marketing of lasers and related products to provide biological treatments that eliminate pain and are safer for patients.

Industry Leading Technology

We design and manufacture nearly 100% of our systems, components and subassemblies at our headquarters in Irvine, California, which also houses engineering, clinical R&D, customer care, training, sales and marketing, and administrative. BIOLASE is ISO 9001 certified and FDA GMP with clean room operations. We also have manufacturing capabilities in Floss, Germany.

Clinical R&D

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.

Training + Certification

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 combining lectures, hands-on exercises and/or live patient demonstrations may be included with the purchase of your WaterLase iPlus laser system.

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