

Fotona<sup>®</sup>  
choose perfection

# Dynamis Pro

Multi-Application Laser Systems



# Dynamis Pro lasers

## Highest performance and convenience hand in hand

### Key benefits

- High precision, tissue-selective treatments
- Intuitive, easy-to-use parameter selection
- Widest range of treatment modes
- Impressive line of advanced accessories
- Minimally invasive, safe treatments, and short downtime
- Great patient comfort and satisfaction

Ergonomically designed  
Rotoflex arm for  
**lightweight operation**

Dual laser wavelength  
technology for  
**expanded range of  
treatments**

Intuitive and  
**intelligent  
graphical user  
interface**

**Instant access to  
preprogrammed  
procedures** via a  
large display

Wireless footswitch  
for **easy access**

Top-hat beam profile  
optics for **uniform  
treatments with  
predictable results**

Dual monitor EFC  
energy control to  
ensure the **precision  
of laser output**

A complete range  
of handpieces and  
scanners for **supreme  
versatility**

Proprietary VSP power  
supply provides  
**a full spectrum of  
treatment modes**

#### ONE OF MY VERY BEST ROI LASERS

"Dynamis is an extremely well-built versatile platform with a large range of applications (more than 50 FDA cleared applications) from areas of Aesthetics, Dermatology, Surgery, ENT, Podiatry, Ophthalmology and Gynecology. This is one of my very best ROI lasers and there are no consumables. This is like a 'Rolls-Royce' Laser, hand built to perfection. This is definitely one of the best lasers I have ever used." **M. Taylor, USA**

# Leading Technology

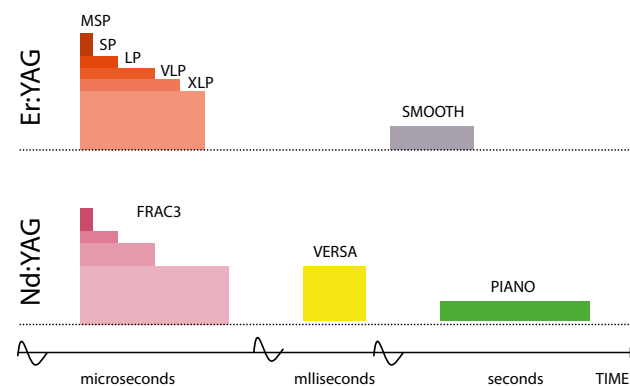
## Two complementary wavelengths with proprietary VSP technology



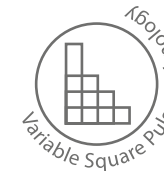
Two laser technologies in one advanced system: Er:YAG and Nd:YAG

At the heart of Dynamis Pro laser systems are two lasers with complementary wavelengths: Nd:YAG with the most homogeneous penetration for effective deep thermal treatments, and Er:YAG with the highest absorption for ablative and non-ablative superficial treatments.

**A combination of Superior Wavelengths for All Major Applications**



**Innovative pulse modes for higher performance: SMOOTH, FRAC3, PIANO**



Fotona VSP technology enables variable pulse durations (from microseconds to longer than one second) to optimize the effect of the laser on the tissue

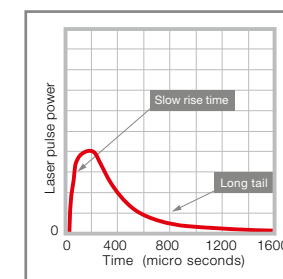
Both laser sources feature Fotona's proprietary VSP (Variable Square Pulse) technology that enables an unprecedented range of treatment modes, from extremely short, microsecond pulses for intense targeting of selected areas, to very long, sub-second-to-second pulses for gentler bulk tissue treatments.

### WHY AN ER:YAG & ND:YAG LASER COMBINATION

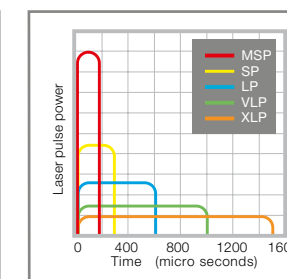
The Dynamis' VSP (Variable Square Pulse) Er:YAG laser inherently ablates skin more precisely than other laser technologies. Er:YAG energy is highly absorbed in water — the main target chromophore for skin resurfacing — and can thus vaporize skin with micron-precision and very little thermal conduction. This keeps undesired effects such as hypopigmentation and persistent erythema, as well as recovery time, to a minimum. The VSP Er:YAG laser in Dynamis systems can be accurately tuned from varying "cold" and "hot" ablative to non-ablative thermal ratios. Full customizability allows you to precisely attain the clinical outcomes your patients desire.

The Nd:YAG laser perfectly complements the Er:YAG laser's ablative action with its ability to penetrate deeply into the skin to create thermal effects without damaging the skin surface. Its homogeneous absorption in the skin and low absorption in melanin allow it to be safely used in all skin types. Compared to conventional technologies, the VSP Nd:YAG pulses of Dynamis lasers create virtually instantaneous FRAC3® temperature increases, limited to the targeted structures only.

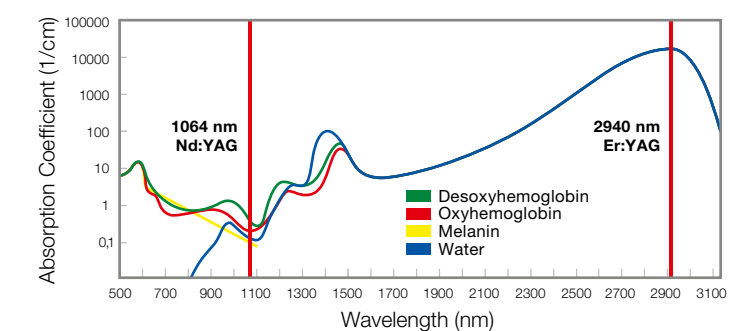
**Proprietary VSP Technology for Widest Range of Treatment Modes**



Standard laser technology



Fotona VSP technology



### BEST WAVELENGTHS

"When it comes to laser treatments, the Dynamis' Er:YAG and Nd:YAG have proven to be, for me, the best wavelengths to minimize complications and shorten recovery times while providing outstanding clinical results." **C. Pidal, Argentina**



# Offering more choice

## Widest range of applications

The Dynamis Pro family consists of five different systems: SP Dynamis, SP Spectro, XS Dynamis, XP Spectro and XP Dynamis.

### Key treatments

- Acne & Acne Scar Revision
- Onychomycosis
- Veins
- Pigmented Lesions
- Scar Revision
- Skin Resurfacing
- Nonablative skin rejuvenation
- Ablative skin rejuvenation
- Fractional treatments
- Warts
- Vascular Lesions
- Full Beam & Fractional Treatments
- Hair Removal
- Gynecology
- Snoring
- Benign Lesions Removal
- Surgical Applications: Laser Lipolysis, EVLA, Hyperhidrosis



Customize your possibilities with the Dynamis Pro family

	Hair removal	Veins	Wrinkles	Skin rejuvenation	Benign lesion	Onychomycosis	Vascular lesions	Skin resurfacing	Fractional skin resurfacing	Scars	Active acne	Pigmented lesions	Warts	Gynecology	Snoring	Lipolysis, Hyperhidrosis	EVLA
SP Dynamis	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
SP Spectro	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
XS Dynamis			•	•	•			•	•	•		•	•	•	•		
XP Spectro	•	•	•	•		•	•				•		•			•	•
XP Dynamis	•	•	•	•		•	•				•		•			•	•

	VERSA	FRAC3	PIANO	S-11 scanner	QCW	F-22 scanner	SMOOTH mode	Gynecology	Surgery
SP Dynamis	•	•	•	•	•	•	•	•	•
SP Spectro	•	•	*	•	*	•	•	•	•
XS Dynamis						•	•	•	
XP Spectro	•	•	*	•	*				•
XP Dynamis	•	•	•	•	•				•

\* Optional with Spectro

#### DYNAMIS PRO FAMILY

Model	SP Dynamis / SP Spectro		XS Dynamis	XP Dynamis / XP Spectro
Laser type	Er:YAG		Er:YAG	Nd:YAG
Wavelength	2940 nm		2940 nm	1064 nm
Power	20 W		20 W	80 W / 35 W
Energy	3 J		3 J	50 J
Scanner	S22 (S-Runner)		S-11	S-11
Modalities	MSP, SP, LP, VLP, XLP SMOOTH, TURBO		LP, FRAC3* QCW*, PIANO*	LP, FRAC3* QCW*, PIANO*

#### A HIGHLY INNOVATIVE WORKSTATION

“Fotona’s Dynamis laser is a highly innovative workstation, which represents a complete ablative skin resurfacing solution capable of providing a wide variety of treatment options.”

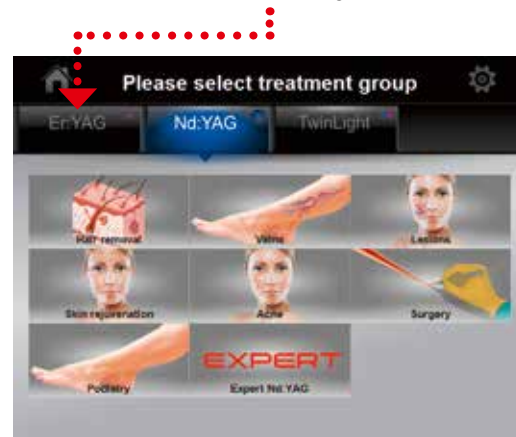
Ming-Li Tseng, Taiwan

# Easy to use with interactive touch screen

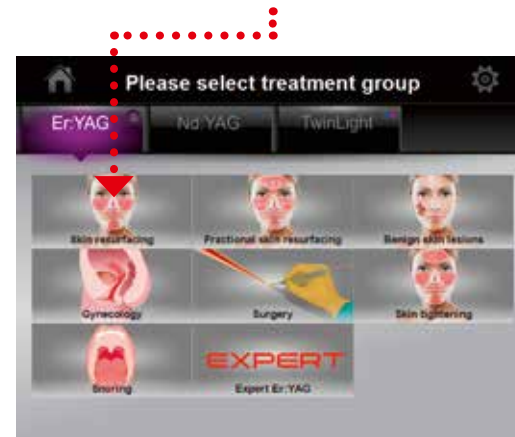
## Key features

- **Easy-to-use, intuitive user interface puts an entire range of applications at you finger tips**
- **Hundreds of presets with additional expert mode**
- **User interface intelligently guides you through all applications**

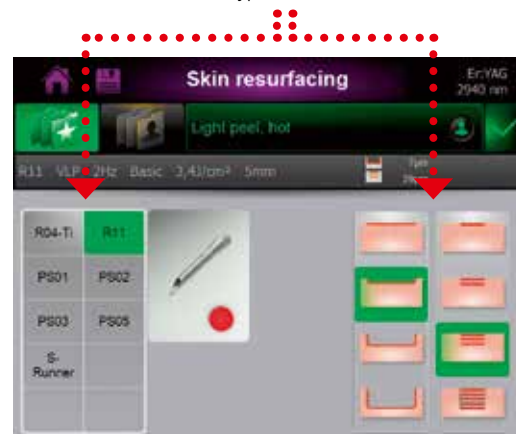
1. Select a wavelength



2. Select a group of applications



3. Select a type of treatment



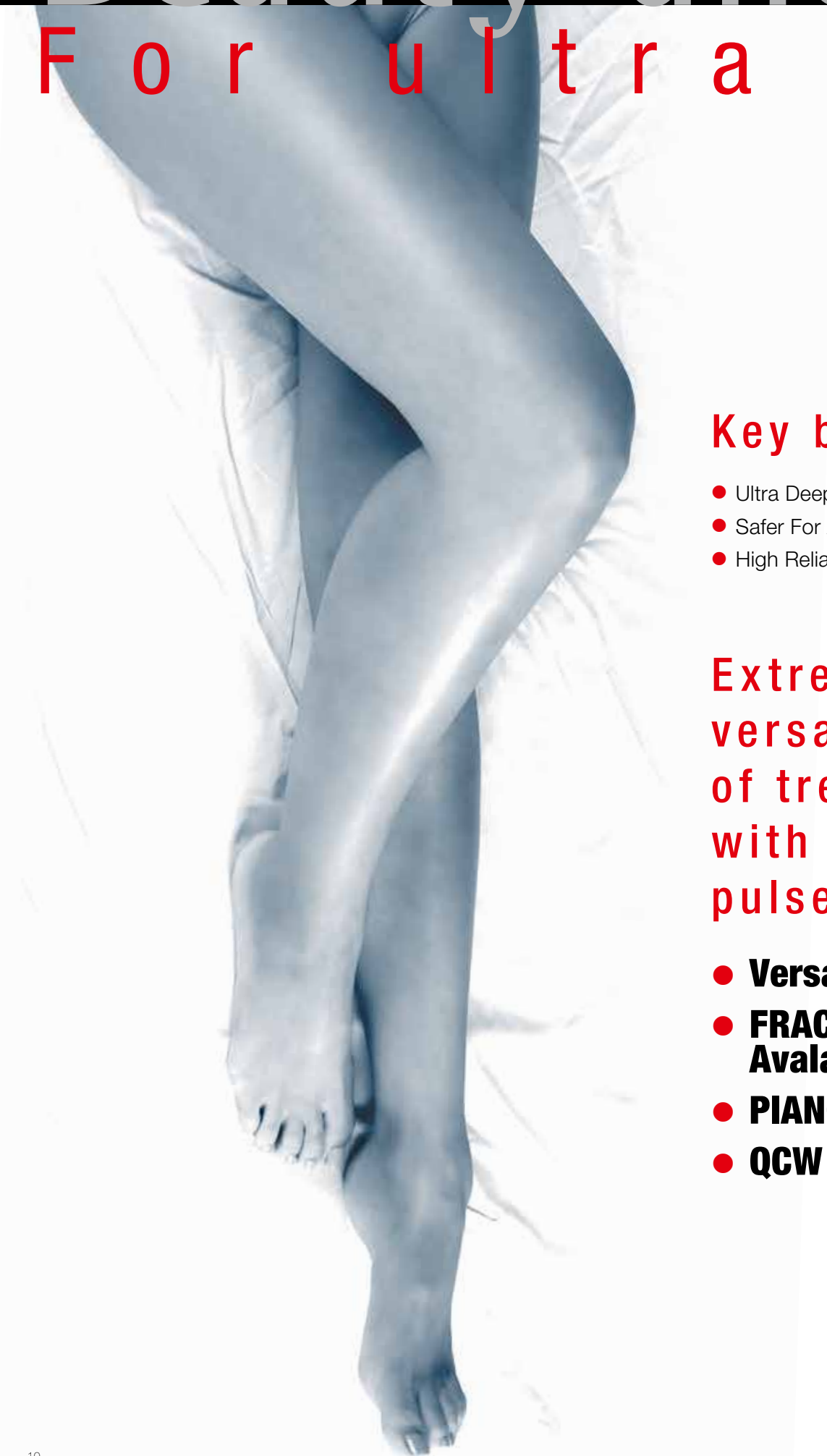
4. Press ready and work





# Beauty and the Nd:YAG beam

## For ultra deep penetration



### Key benefits

- Ultra Deep Penetration
- Safer For All Skin Types
- High Reliability

### Extreme versatility of treatments with different pulse modes

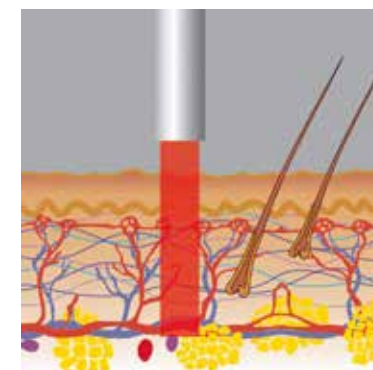
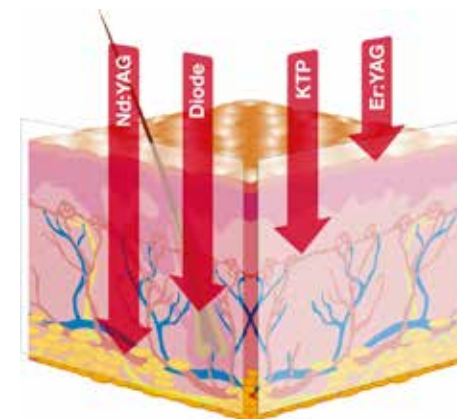
- **Versa**
- **FRAC3® & Avalanche FRAC3®**
- **PIANO®**
- **QCW**



**Nd:YAG** laser is characterized by its homogeneous penetration up to ten millimeters deep and selective absorption in tissue chromophores. These two features allow the Nd:YAG laser light to reach deep skin structures without damaging the epidermis, regardless of skin type.

### S-11 SCANNER

- High pulse rates for enhanced speed
- Computer controlled scanning of up to 42 cm<sup>2</sup> areas for perfect skin coverage
- 3 different scanning patterns for optimal patient comfort
- 3 different spot sizes for greater treatment precision



### EFFECTIVE AND RELIABLE

"The advantages of the Nd:YAG laser can be summarized as follows: effective, quick, reliable, cost effective, and no unnecessary consumables. Our patients are very satisfied with the treatment because it is safe, effective, quick and easy."

**R. Gansel, Germany**

# Versa LP Safety and efficacy in a millisecond Nd:YAG pulse

## Key treatments

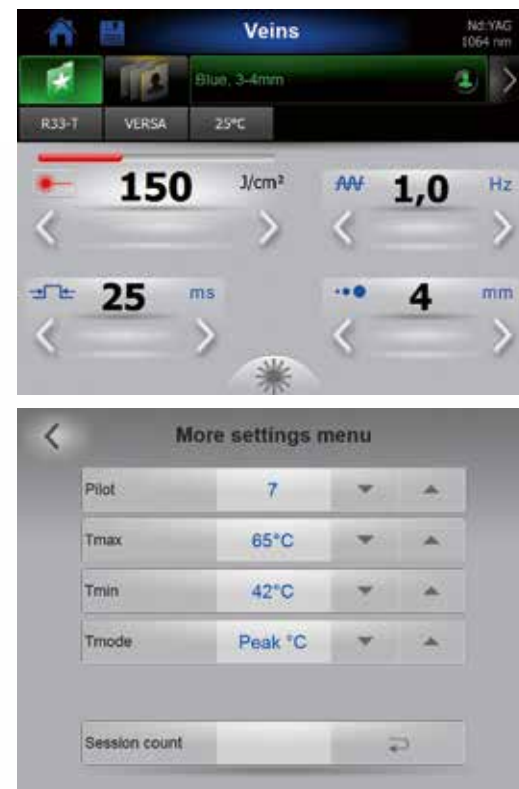
- Veins
- Vascular lesions
- Acne
- Warts
- Onychomycosis
- Skin rejuvenation



Leg veins, courtesy of R. Sult

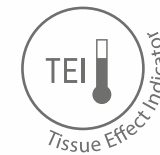


Active acne, courtesy of R. Sult



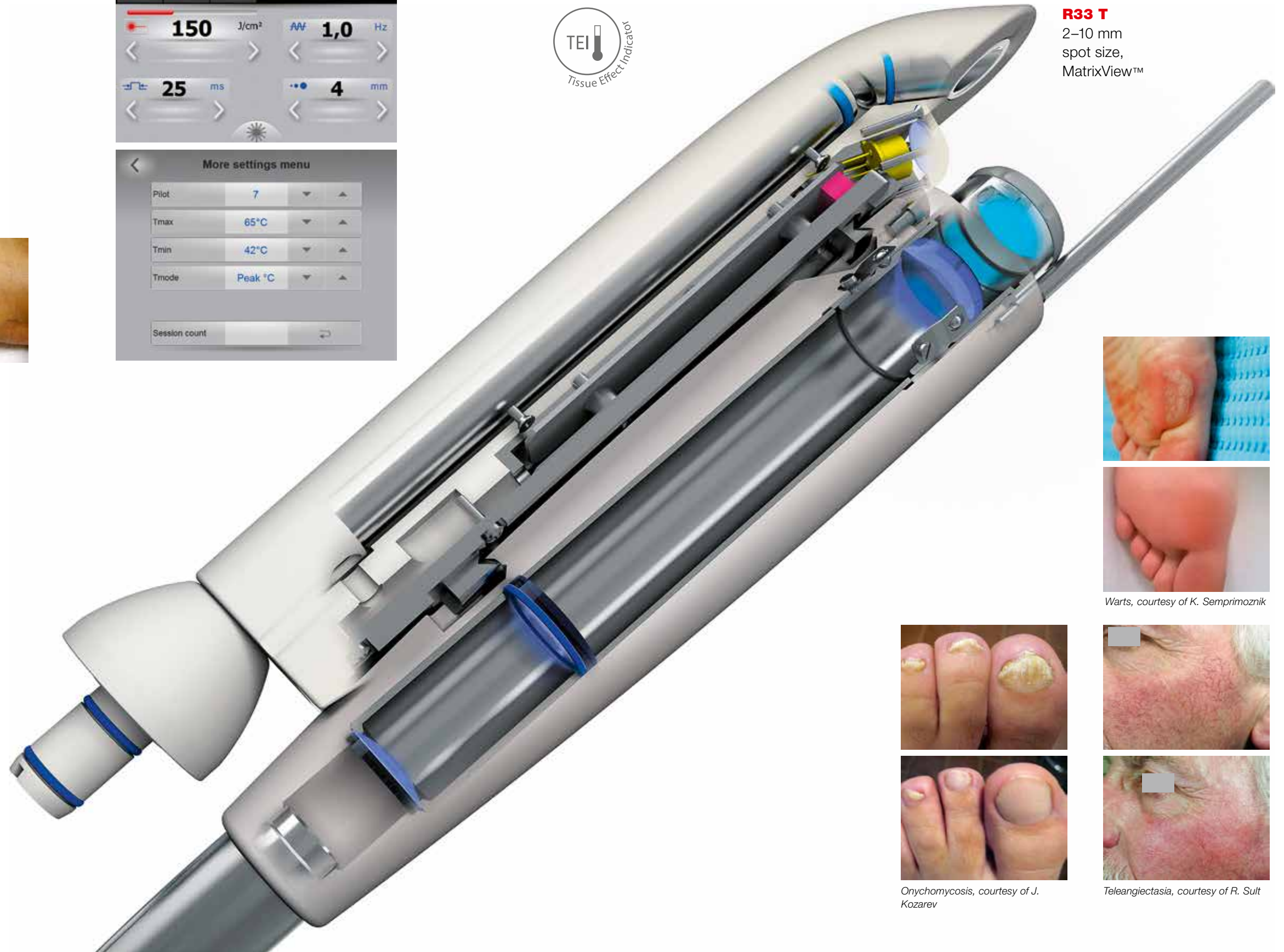
### MatrixView™

Thermal detection system in a handpiece for enhanced safety and accuracy of treatments.



### R33 T

2–10 mm spot size, MatrixView™



Warts, courtesy of K. Semprimožnik



Onychomycosis, courtesy of J. Kozarev



Teleangiectasia, courtesy of R. Sult



# FRAC3<sup>®</sup> Microsecond pulses for a 3D self-induced effect

## FRAC3

is a novel self-induced, non-ablative, three-dimensional fractional modality for skin treatments. FRAC3 utilizes the short pulse duration and high peak power density of VSP generated Nd:YAG laser pulses to produce a three-dimensional fractional pattern in the epidermis and dermis, with damage islands that are predominantly located at the sites of targeted skin imperfections.



Hair removal, courtesy of R. Sult



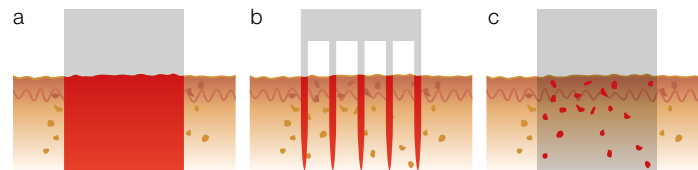
Fractional skin tightening, courtesy of R. Gansel



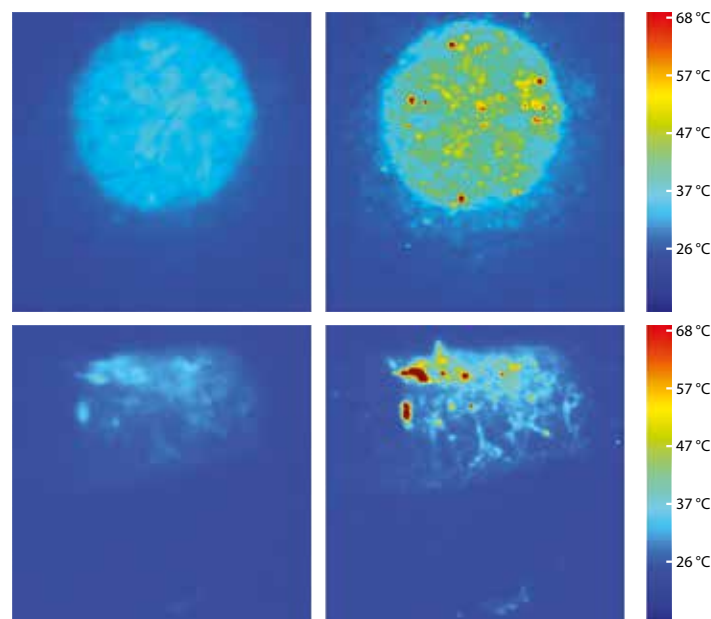
Hair removal, courtesy of A. Desai

## Key treatments

- Skin rejuvenation
- Hair removal



Laser-induced damage islands as healing centers:  
a) standard uniform laser treatment;  
b) standard two-dimensional fractional treatment;  
c) novel self-induced three-dimensional FRAC3<sup>®</sup> laser treatment

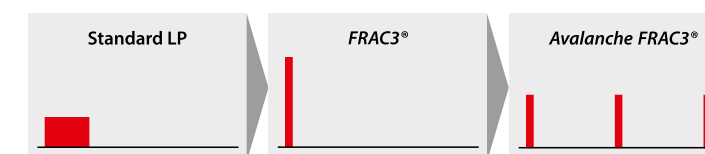


Skin surface temperature thermal image following a long pulse and FRAC3<sup>®</sup> Nd:YAG laser pulse. Self-induced temperature fractionality can be observed following illumination with a FRAC3<sup>®</sup> pulse.

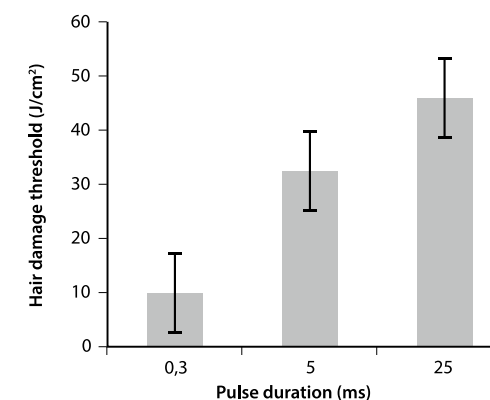
## Avalanche FRAC3<sup>®</sup>: the ultimate laser technology for hair removal

### AVALANCHE FRAC3 HAIR REMOVAL

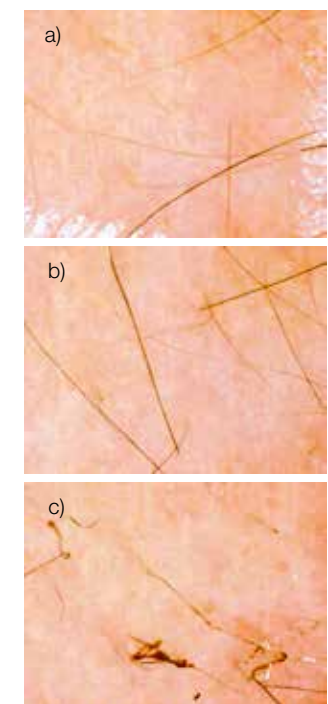
is based on a phenomena in which the absorption of laser light in hair is increasingly enhanced following each successively delivered FRAC3<sup>®</sup> laser pulse. The avalanche method improves the efficacy of current hair-removal procedures, reduces patient discomfort and, in most cases, eliminates the need for skin cooling.



The evolution of Nd:YAG laser hair-removal protocols. The gold standard LP (Long Pulse) hair-removal has been superseded by the FRAC3<sup>®</sup> protocol, which is now improved upon even further by taking into account the temperature avalanche enhancement effect of subsequently delivered FRAC3<sup>®</sup> laser pulses.



Measured dependence of the hair damage threshold (defined by the lowest fluence at which visible hair damage occurs) on the Nd:YAG laser pulse duration.



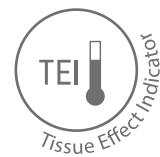
a) Hair before laser irradiation;  
b) Hair irradiated with long-pulse Nd:YAG; no visible change is observed;  
c) Hair irradiated with FRAC3<sup>®</sup> Nd:YAG pulse; the hair is carbonized and blackened.



# PIANO Be in tune with PIANO mode

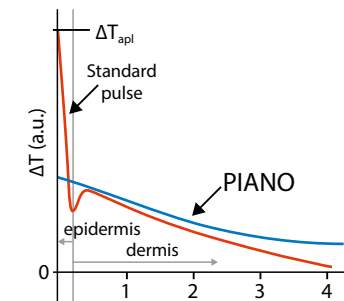


**R34 T**  
15–20 mm  
spot size,  
MatrixView™



## Key benefits

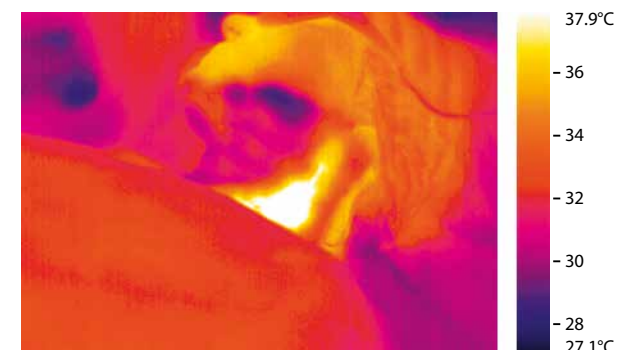
- Intended for homogeneous photothermal treatments of the dermis
- Designed to bypass high absorption within the epidermis



**PIANO**, the new, super-long modality extends the Nd:YAG pulse durations to the seconds regime. This is much longer than the thermal relaxation time of the epidermis or any other skin structures, and does not cause high initial temperature peaks in the epidermis. It is therefore indicated for treatments where overall homogeneous, bulk heating of the dermis is desired.



PIANO skin tightening, courtesy of M. Taylor



Controlled bulk heating



PIANO skin tightening, courtesy of M. Taylor

# QCW Create body shapes with surgical QCW

## Key benefits

- Fast and efficient procedures
- Significantly reduced recovery times
- For body sculpting
- Antiaging treatments from the inside-to-out:
  - **Laser lipolysis**
  - **Endovascular treatments**
  - **Hyperhidrosis**



Laser lipolysis, courtesy of D. Maletic



EVLA, courtesy of A. Sikovec



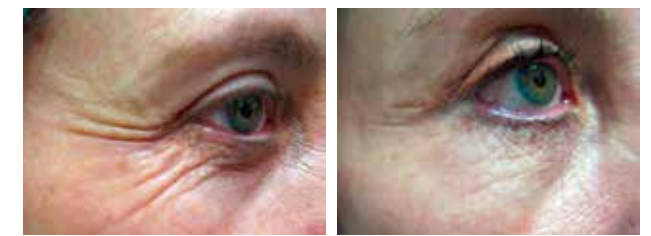
Interstitial jawline tightening, courtesy of D. Maletic

# Beauty and the Er:YAG beam

## For superior absorption

**Er:YAG** laser utilizes a unique wavelength that is absorbed within a few microns of tissue, thus avoiding any damage to deeper-lying tissues.

**VSP** technology enables the operator to easily adjust the laser treatment modality from micro-short (MSP) to extra-long (XLP) pulses in order to precisely balance the removal of epidermis with thermal effects on collagen.



Periocular wrinkles, courtesy of C. Pidal



Benign lesions, courtesy of O. Matyunin



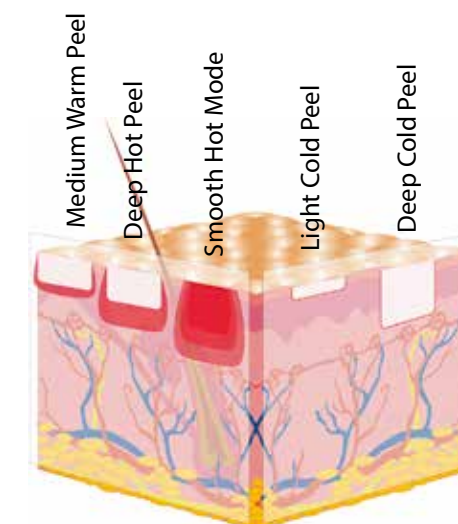
Periocular wrinkles, courtesy of R. Sult

### Key features

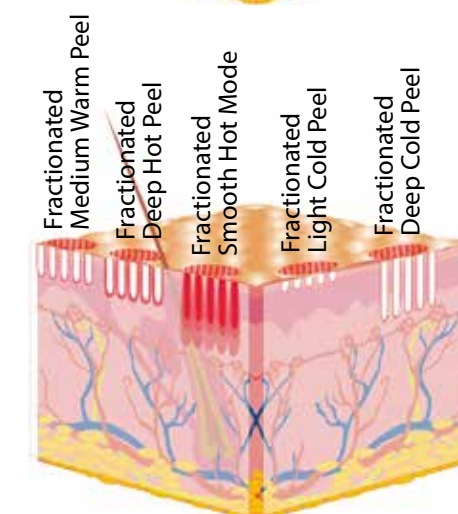
- Superior absorption
- Most efficient ablation
- VSP to control the ablation/coagulation ratio
- From mild-cold to deep-hot ablation
- Full beam and fractional ablations
- Special TURBO and SMOOTH mode

### Versatility of treatments

- **From light-cold to deep-warm peels**
- **Fractional treatments**
- **SMOOTH® mode**



Selection of different available VSP Er:YAG laser treatment regimes



Selection of different available fractional laser treatment regimes

#### THE IDEAL BALANCE BETWEEN EFFICIENCY, DOWNTIME AND THE RISK OF PIH

"Dynamis Er:YAG is a very effective tool for resurfacing treatments, in terms of the balance between efficiency, downtime and the risk of PIH (post-inflammatory hyperpigmentation)." **A.S.Lun, Hong Kong**



# VSP Er:YAG Fractional treatments **When less becomes more**

**Fractional** handpieces are based on the concept of producing an array of microscopic wounds on the skin surface that are rapidly reepithelialized by the undamaged surrounding tissue, sparing the epidermis in the untreated areas.

## Key benefits

- Less invasive skin resurfacing
- Accelerates recovery
- Enhanced wound healing
- Superior for scar healing

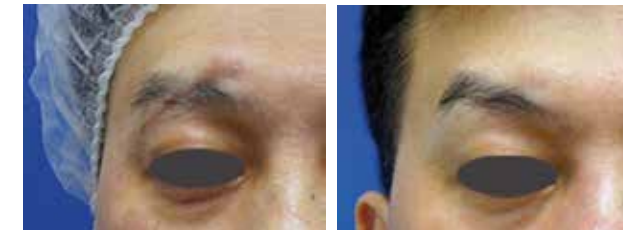
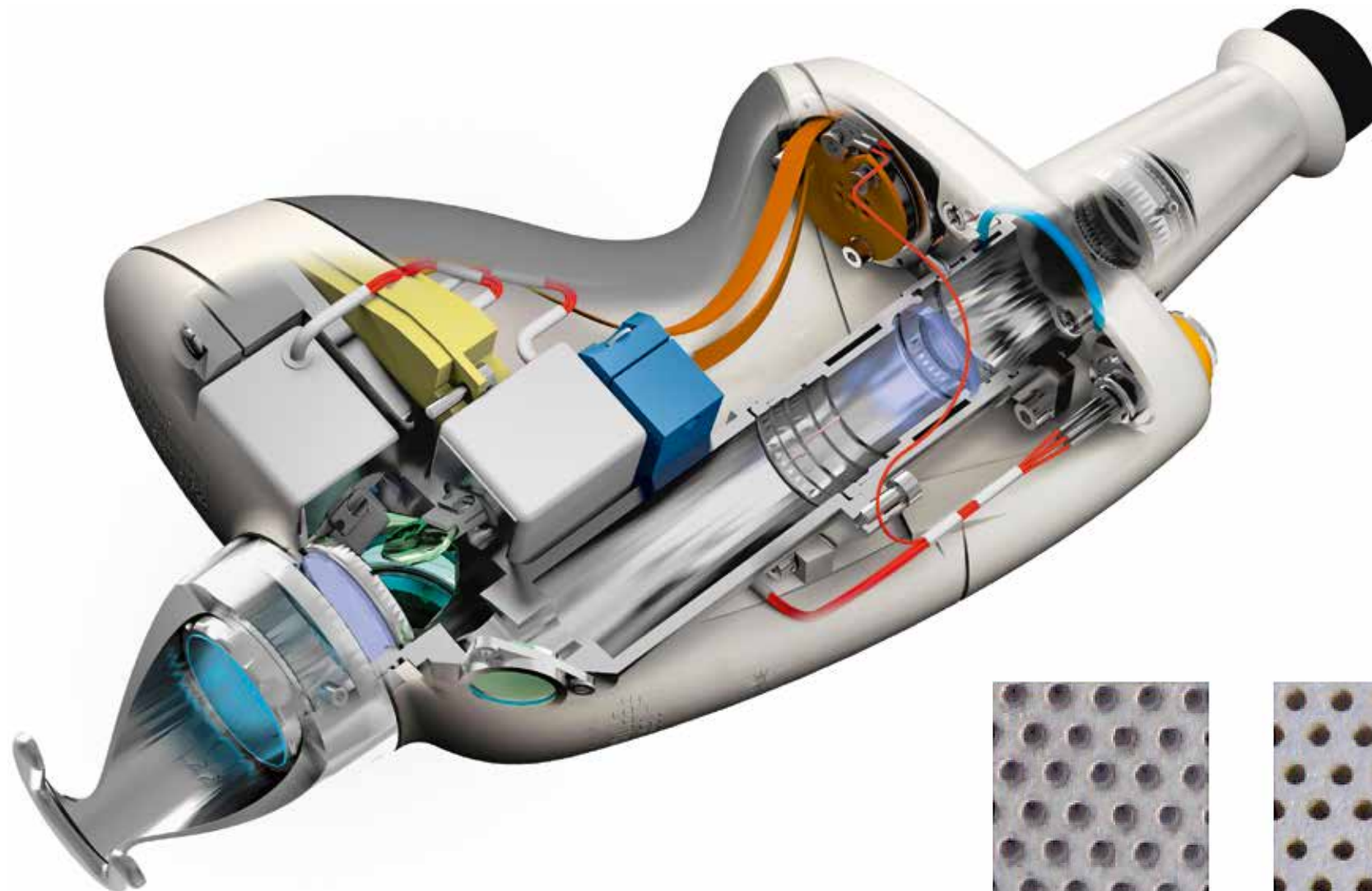
### F-RUNNER

- Computer-controlled scanning
- Unrivalled accuracy and uniformity over large areas
- Intense fractional treatments
- 250  $\mu\text{m}$  microspot size
- Adjustable scanning field coverage



### FS01

- Sharp fractional treatments
- 250  $\mu\text{m}$  microspot size
- Fast, stamping treatments



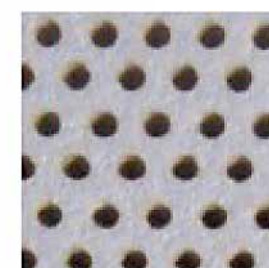
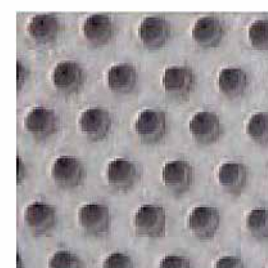
Scar revision, courtesy of A. Au



Perioral wrinkles, courtesy of F. Paciolla



Scar revision, courtesy by H. M. Omparkash



**TURBO** mode is a unique technology feature which sequences identical pulses within the same treatment spot on the skin, thus enhancing ablation depth and creating more accurate and sharply defined micro-channels.



Acne scars, courtesy of Y. Targonskaya

# SMOOTH<sup>®</sup> mode A gentle touch with SMOOTH mode

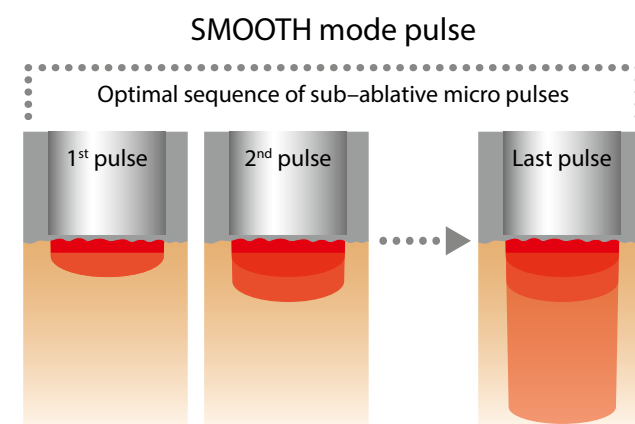
Non–ablative VSP Er:YAG is a unique modality for non–invasive thermal–only treatments.



**PS03**

2–7 mm patterned for SMOOTH mode

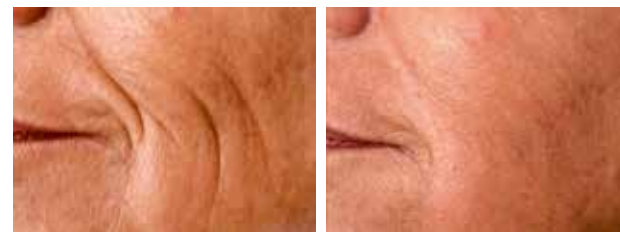
**SMOOTH<sup>®</sup>** mode treats the skin in a smooth, almost “feather-like” non-ablative manner, without bleeding and with precisely controlled temperature deposition. The optical energy is delivered in a unique, sub-second long pulse sequence which prevents temperature build-up at the surface and achieves homogeneous heating within several hundred micrometers of the tissue.



Thermal non-ablative treatment without any bleeding risk or damage to deeper-lying tissues

## IDEAL FOR NON-ABLATIVE ER:YAG SKIN TIGHTENING

SMOOTH mode enables non-ablative laser skin remodeling based on controlled induction of thermal injury of the collagen while preserving the epidermis. In addition to an immediate effect resulting in the shrinkage of collagen fibers, the initiation of neo-collagenesis occurs causing the generation of new collagen. The effects result in an overall improvement of laxity and elasticity in the treated tissue.



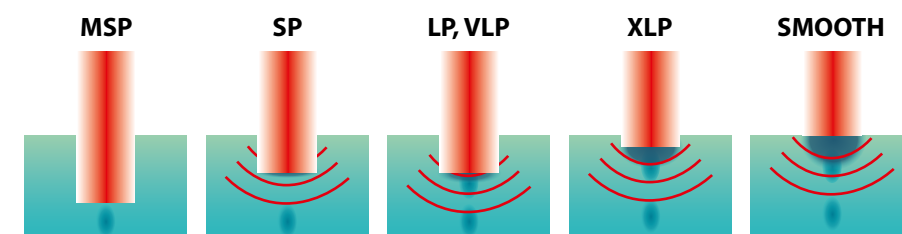
SmoothLiftin™ intraoral tightening, courtesy of A. Gaspar



Skin tightening, courtesy of A. Gaspar



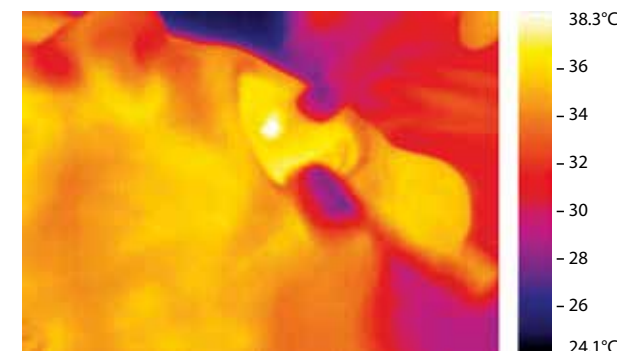
Skin tightening, courtesy of C. Pidal



The VSP Er:YAG laser in Dynamis systems can be accurately tuned from varying “cold” and “hot” ablative to non-ablative thermal SMOOTH mode

## NightLase<sup>®</sup> feather-like VSP Er:YAG treatment for snoring

- Non-invasive thermal-only treatment of the soft pallet to reduce snoring
- No pain, no anesthesia



Fotona's NightLase<sup>®</sup> treatment is a patented, fast, non-invasive and patient-friendly way of increasing the quality of a patient's sleep. NightLase<sup>®</sup> reduces the effects of sleep apnea and decreases the amplitude of snoring through the application of gentle, superficial Er:YAG laser pulses from Fotona's SP Dynamis laser system. During NightLase<sup>®</sup> treatment, laser light gently heats and stimulates tightening of the patient's oral tissue. The results of clinical studies\* confirmed that Fotona's NightLase<sup>®</sup> treatment with Er:YAG laser is a safe and efficient method for significant reduction of snoring.

\* K. Miracki, Z. Vizintin Nonsurgical Minimally Invasive Er:YAG Laser Snoring Treatment. J Laser Health Acad, Vol. 2013, No.1  
K. Svahnström Er:YAG Laser Treatment of Sleep-Disordered Breathing. J Laser Health Acad, Vol. 2013, No.2.



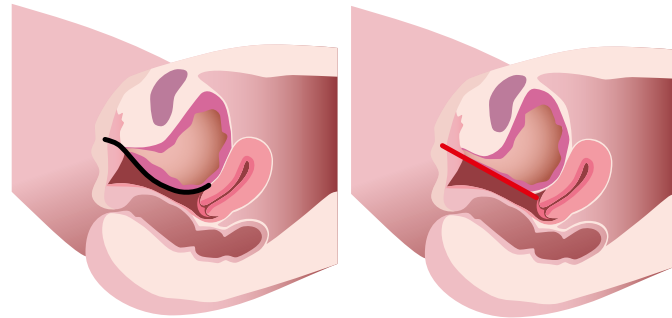
# Feather-like VSP Er:YAG treatments with SMOOTH mode for gynecology

## Key treatments

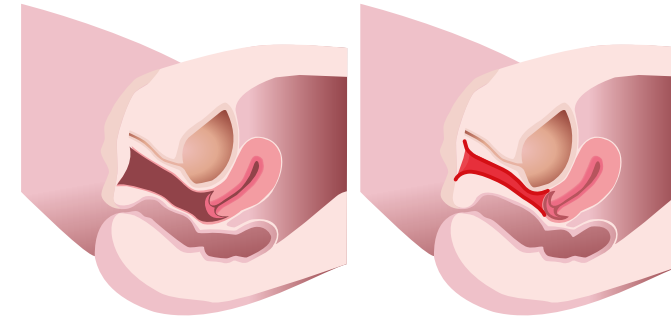
- Minimally invasive, patented gynecological treatments with SMOOTH mode
- Stress urinary incontinence
- Vaginal relaxation treatments

## IncontiLase®

- laser treatment of mild and moderate stress and mixed urinary incontinence (SUI)
- photothermal tightening of the urethral and anterior vaginal wall region



*Clinical studies confirm that IncontiLase® is an effective, safe and comfortable treatment option for symptom relief in patients with mild or moderate SUI.*



*Scientific results clearly show great improvements in vaginal tightness and sexual gratification.*

## IntimaLase®

- laser vaginal tightening (LVT) through photothermal tightening of the vaginal canal

# Fotona4D™: Multiple Modalities for Enhanced Results

## SYNERGISTIC TREATMENTS FROM TWO WAVELENGTHS WORKING TOGETHER

Enabled by the expanded capabilities of the Nd:YAG and Er:YAG wavelengths, the Dynamis provides up to four dimensions of treatment, including a novel SmoothLiftin™ intraoral laser treatment vector. Fotona's complementary Er:YAG and Nd:YAG wavelengths are synergistically applied in 4 different modes: SMOOTH®, FRAC3®, PIANO® and SupErficial™ to work on deeper, medial and superficial connective structures of the skin, while simultaneously targeting different skin imperfections. Fotona's 4D laser treatment of both the exterior facial and interior oral cavity enables full-thickness contraction of collagen for persistent, no-downtime tightening and volumization without injectables. Combining these 4 unique modes and two complementary wavelengths results in a respectable face lifting treatment.



Before

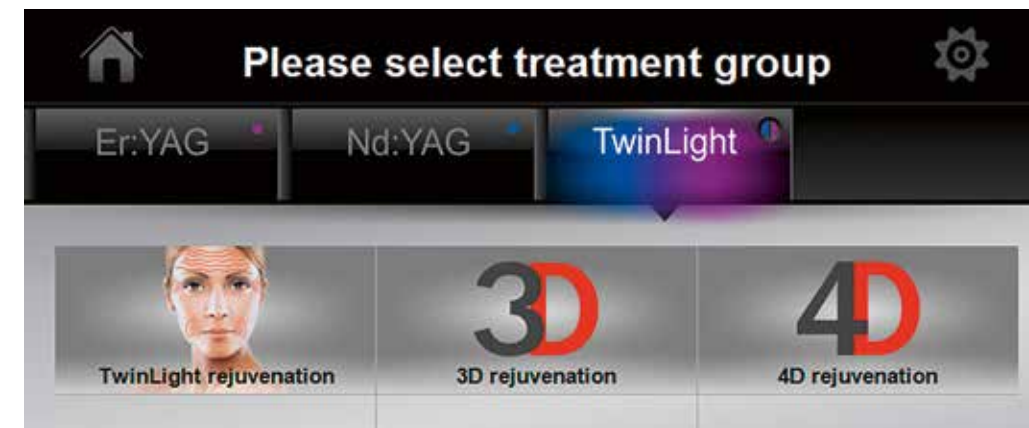
After Fotona4D™ procedure

Courtesy of A. Gaspar

## BEST POSSIBILITIES FOR PATIENTS

"The intraoral non-ablative SmoothLiftin™ results in a plumping effect to the nasolabial folds from the inside, much like a filler. Combining the three Fotona skin treatment modes of Dynamis with the fourth, intraoral SmoothLiftin™ gives the physician a new, powerful non-invasive treatment. Together these unique four laser modalities provide a full thickness penetration laser treatment that can really impress."

Dr. M.C.Lee, USA



Multiple treatment modalities range from the 2-dimensional Twinlight® procedure to the 4-dimensional Fotona4D™ procedure.

## BEST POSSIBILITIES FOR PATIENTS

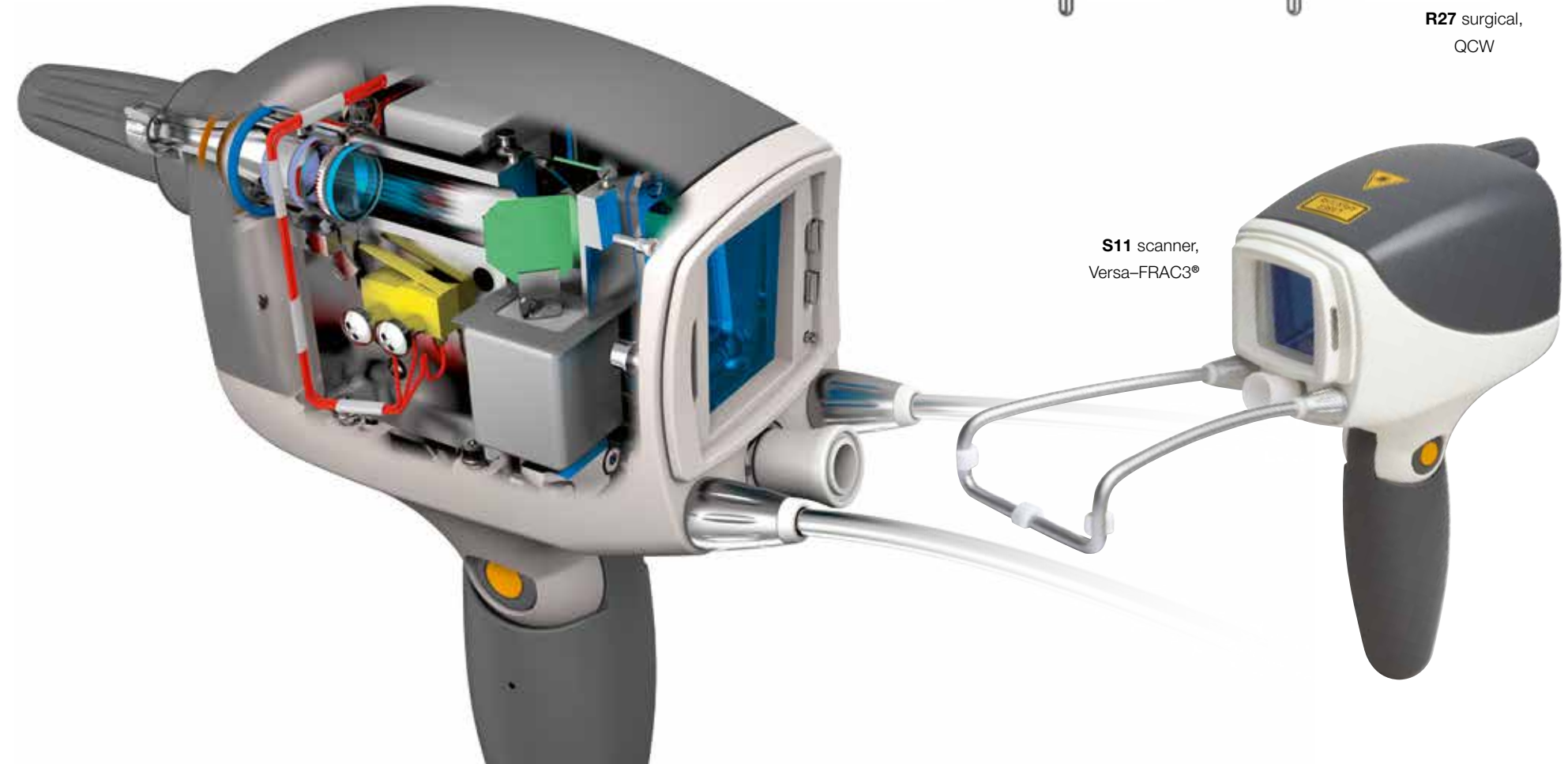
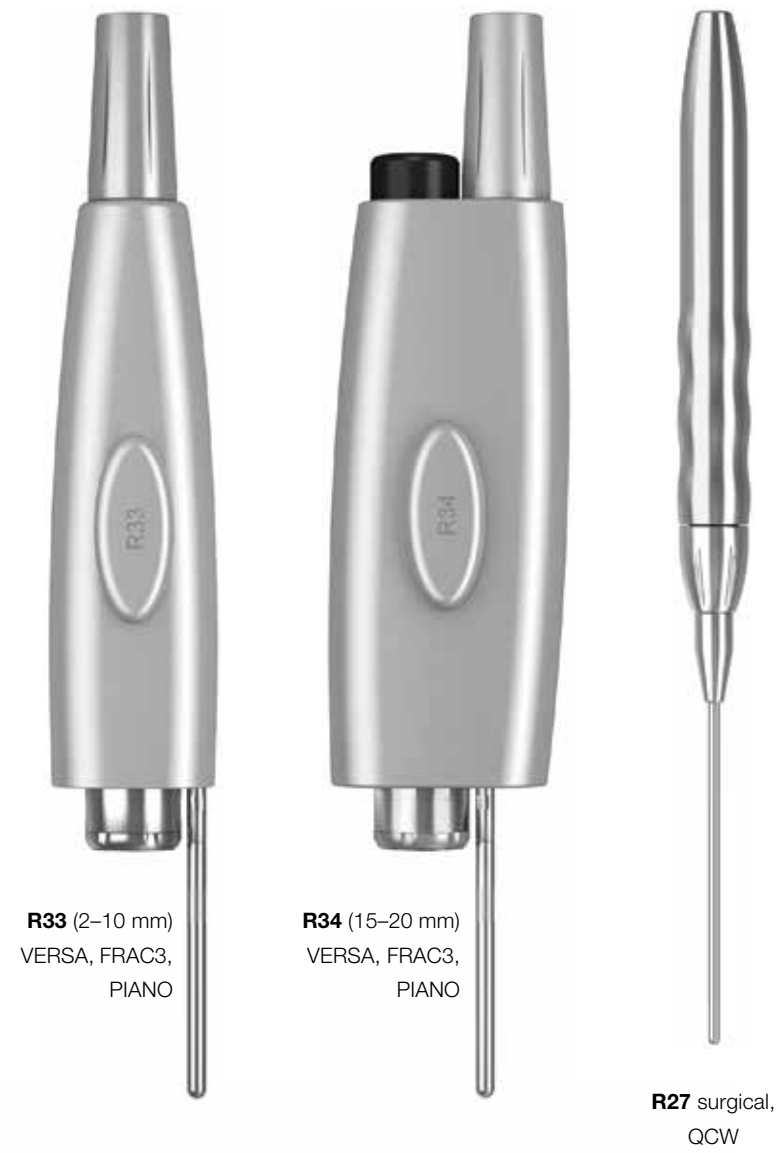
"The Smoothliftin™ procedure is typically painless, not requiring anesthesia and can be done without any downtime. Moreover, it can be performed year round, including the summer months, without the risk of adverse events such as post-procedural hyperpigmentation." Dr. A. Gaspar, Argentina

# A focus on applications with an impressive line of advanced accessories

Er:YAG



Nd:YAG





**SINCE 1964**

Fotona's 50 years of experience has inspired some of the world's most advanced multi-application aesthetic laser technologies. At the heart of Fotona's medical lasers are high-performance, solid-state crystal laser sources that generate the industry's proven and effective treatment wavelengths. These 'golden-standard' wavelengths are well suited for handling an exceptionally wide range of aesthetic and clinical procedures. Fotona's proprietary handpieces, innovative operating modes and advanced beam-profile technologies further enhance these medical wavelengths to ensure maximum performance and efficacy.



Fotona, LLC  
1241 Puerta Del Sol  
San Clemente, CA 92673, USA

Fotona, d.d.  
Stegne 7  
1000 Ljubljana, Slovenia, EU

**info@fotona.com**  
**www.fotona.com**



ISO 9001:2008, EN ISO 13485:2003,  
MDD 93/42 EEC Annex II excluding  
(4), ISO 13485:2003 (CMDAS).

