



# Cyber™ family

Thulium Laser System





# Cyber TM

150W - 200W

THULIUM SURGICAL LASER SYSTEM

**Cyber TM** represents the family of high power Thulium (Tm:YAG) laser dedicated to **BPH** and **urology treatments**. Other applications include open, laparoscopic or endoscopic surgery to perform excision, resection, ablation, vaporization, coagulation and hemostasis of soft tissues.

Its  $2\ \mu\text{m}$  radiation is strongly absorbed by water (highly present in all tissues), so that the cutting and vaporization speed remains relatively constant during the procedure, regardless of tissue vascularization.

The laser beam penetrates only a fraction of a millimeter in the tissue, providing the surgeon with a high degree of control and reducing substantially the risk of inadvertent injury.



## General Overview

- ✓ BPH Treatments
- ✓ Minimal Depth of Penetration (0.1 - 0.2 mm)
- ✓ Effective Hemostasis
- ✓ Unmatched Cutting and Ablation
- ✓ Soft Tissue Surgery
- ✓ Supreme Versatility
- ✓ Quick Patient Recovery



### Intuitive GUI



12" Touchscreen



Save & Load of Settings

Selected Application

Fiber Diameter  
200 - 1000 µm

Emission Modes  
Continuous or Pulsed

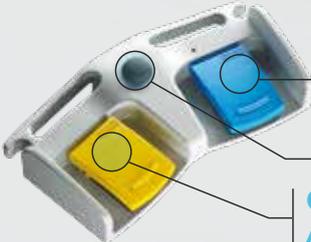
Fiber Connection

Transportation Handle



Wheel Dampers  
For easy and safe device relocation and transportation

### DOUBLE FOOTSWITCH



Coagulation

Ready / Standby Switch

Cutting, Ablation

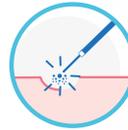
The double footswitch enables immediate switch from cutting to coagulation mode, without bothersome interruptions for settings readjustment.

# Enucleation

*ThuLEP, ThuVEP*

## SUPERIOR CUTTING

The limited depth of penetration, together with the fast ablation of targeted tissue, results in precise cut without affecting surrounding tissues



## HIGH CUSTOMIZATION

Cutting precision and wavelength versatility allow to tailor the technique to patient's needs and surgeon preference



## SIZE INDEPENDENT

Based on clinical studies, ThuLEP was proven to be effective also for big and small prostates, enlarging patient eligibility for treatment



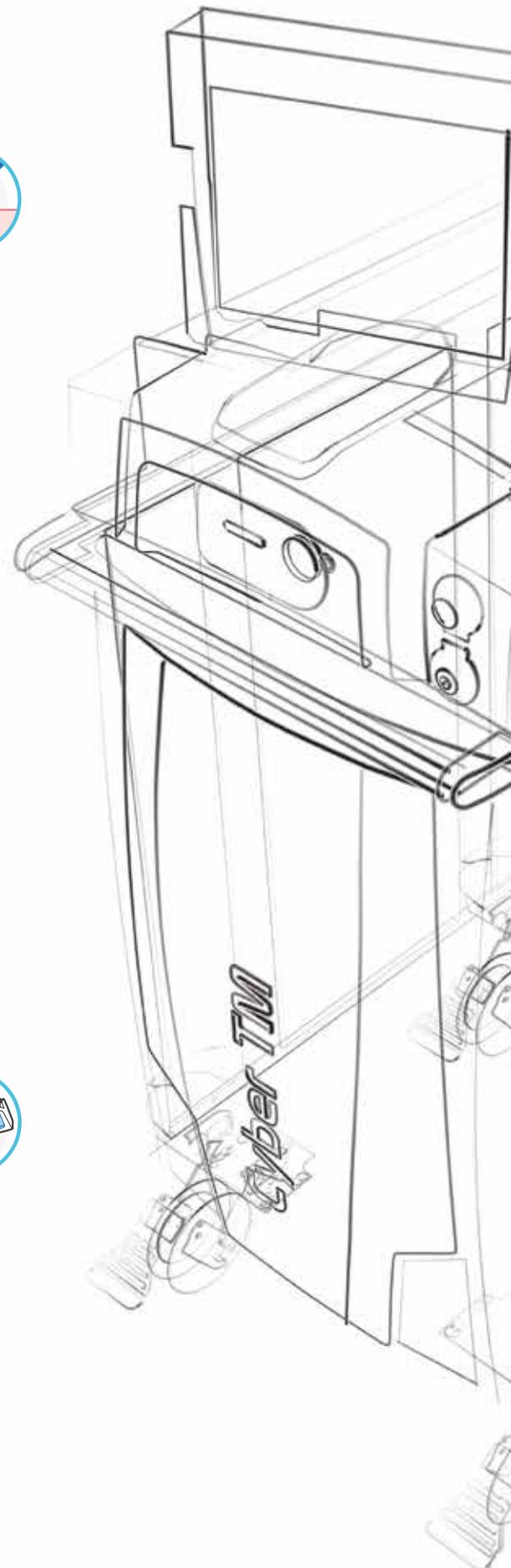
## ENHANCED HEMOSTASIS

Thulium radiation allows effective hemostasis already while cutting. Coagulation of bleeders take few seconds



## DOUBLE EMISSION

The double footswitch allows immediate switch from cutting to coagulation mode



# Vaporization

ThuVAP



## EASY TO LEARN

The intuitive layer after layer ablation of the adenoma ensures a short learning curve



## NO NEED FOR MORCELLATOR

The complete ablation of the adenoma obviates the morcellation phase



## THE FASTEST VAPORIZATION EVER

The 200 W power coupled with the 1000  $\mu\text{m}$  fiber enables unmatched vaporization rate with respect to any other laser



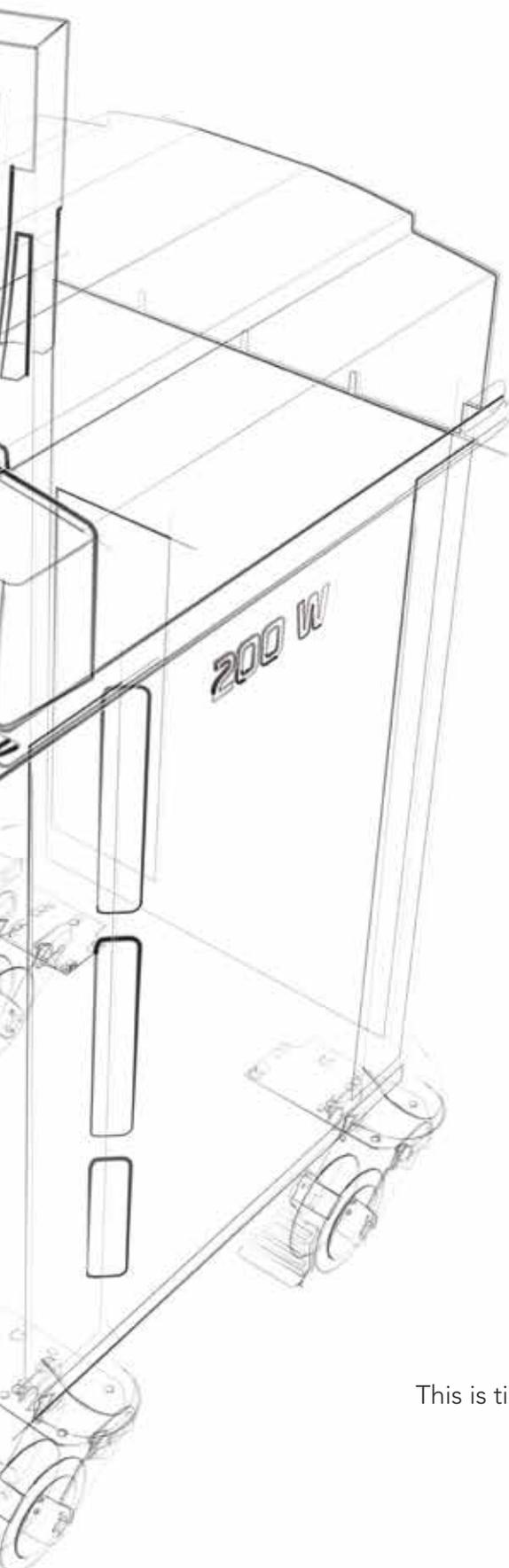
## SIDE FIBER

The side emission allows intuitive adenoma ablation as with Green vaporization

## Concerned about tissue charring?

This is tissue appearance 24 hours only after ThuVAP

*Image courtesy of L. Carmignani, MD*



# Advantages



## 200 W POWER

The highest output power available on the market for the greatest vaporization rate



## CONFINED DAMAGE

The limited depth of penetration allows superior precision and effective control, even with high power emission



## FAST RECOVERY

Use of Thulium for BPH was proven to reduce catheterization and hospitalization time with respect to traditional treatments



## SUPREME BPH VERSATILITY

Its excellent cutting and ablation quality, together with the high power, allows total freedom of choice regarding the technique to use

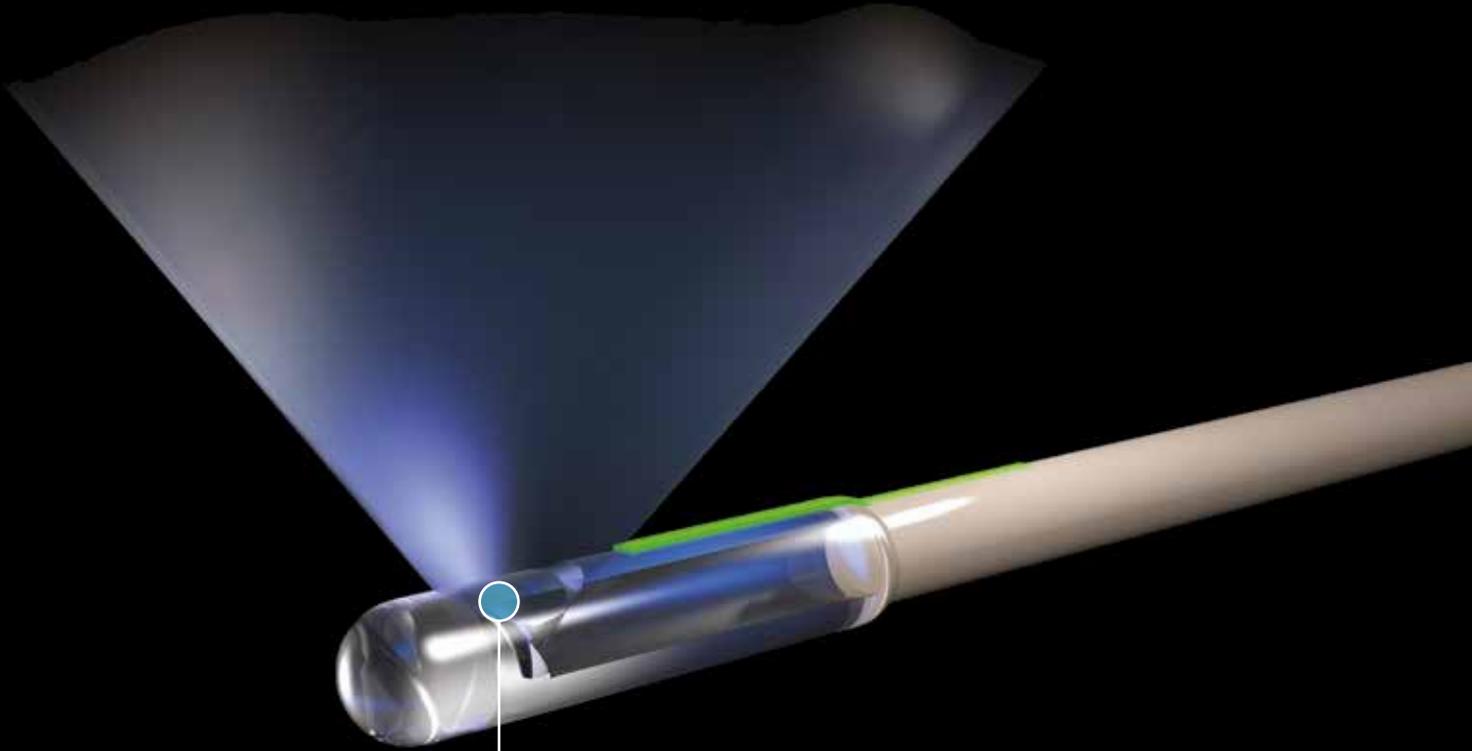


## SUPERIOR MULTIDISCIPLINARITY

Cyber TM can be effectively used in specialties other than Urology, such as Thoracic Surgery, ENT and General Surgery



# Complete Solution



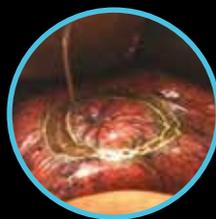
## SIDE FIBER

The side emission allows gentle and intuitive ablation of the adenoma as with Green laser, even though the ablation rate by Thulium wavelength is greater (*refer to EAU Guidelines*)



## PULSED THULEP

Cyber TM can fire also with pulsed emission: the high frequency (up to 100 Hz) allows to diminish the charring while cutting



## THORACIC SURGERY

Thulium radiation allows precise cutting in lung resection and endobronchial ablation

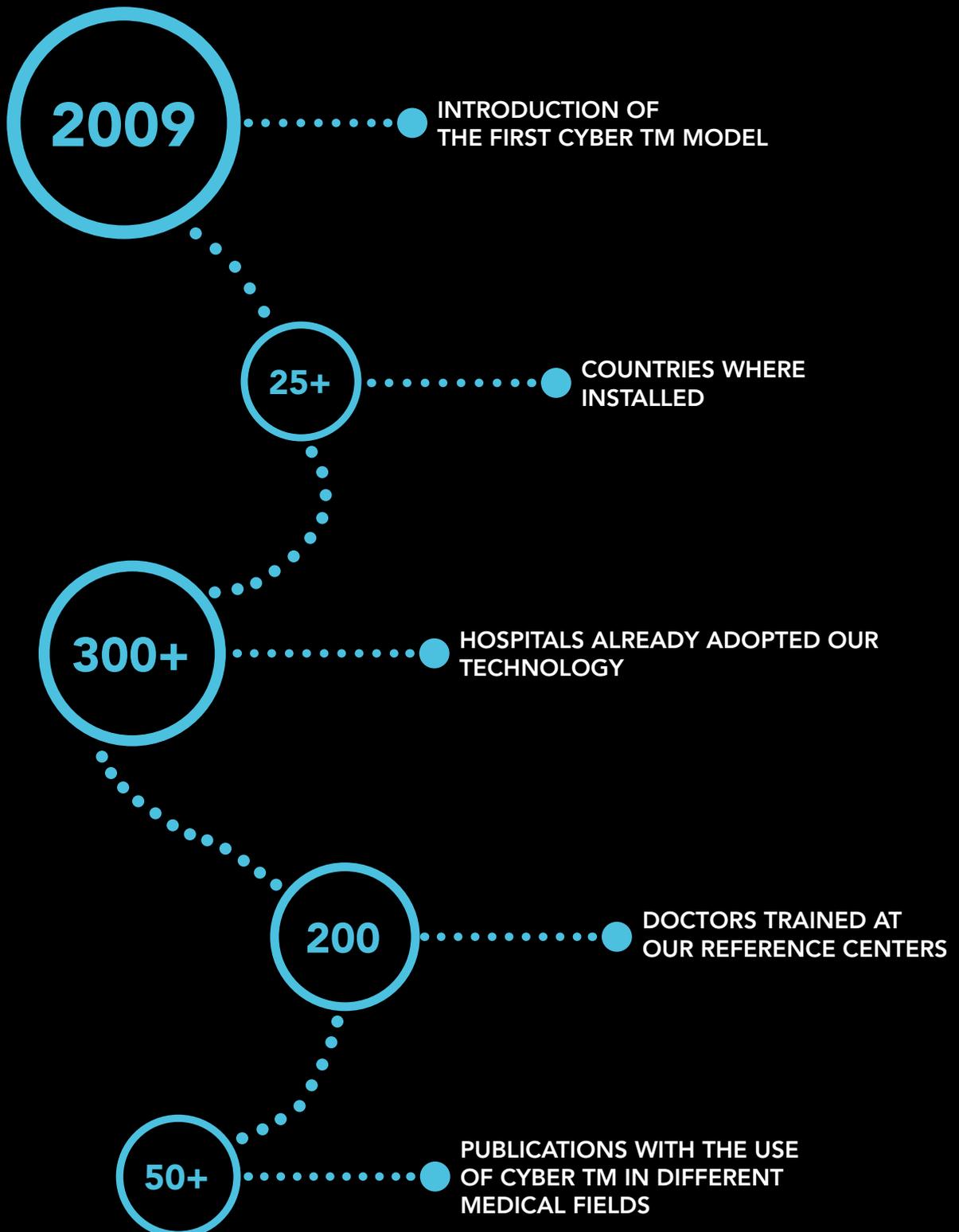


## GI SURGERY

Its ablation and coagulation effectiveness come in handy in this field, as alternative to APC surgery

# Device History

**Cyber TM** device is a well-established laser technology in the worldwide market. These the numbers of its success:





# Significant ROI

Cyber TM allows multiple cost-savings, such as:



## SHORTER HOSPITALIZATION

Use of Thulium laser was proven to shorten hospital stay with respect to TURP, enabling a "one-day surgery" for many patients



## FEWER ADVERSE EVENTS

Publications with Cyber TM demonstrate a low incidence of postoperative complications associated with the use of this laser



## LONG LASTING OUTCOMES

Clinical evidences support the use of Thulium laser for a definitive resolution of LUTS due to BPH, with extremely low recurrence rate



## INTERDISCIPLINARY PLATFORM

Cyber TM's properties allow its use in other urology soft tissue surgery. Furthermore, other hospital wards can benefit of the use of such system, addressing multiple needs from different medical specialties with a unique device

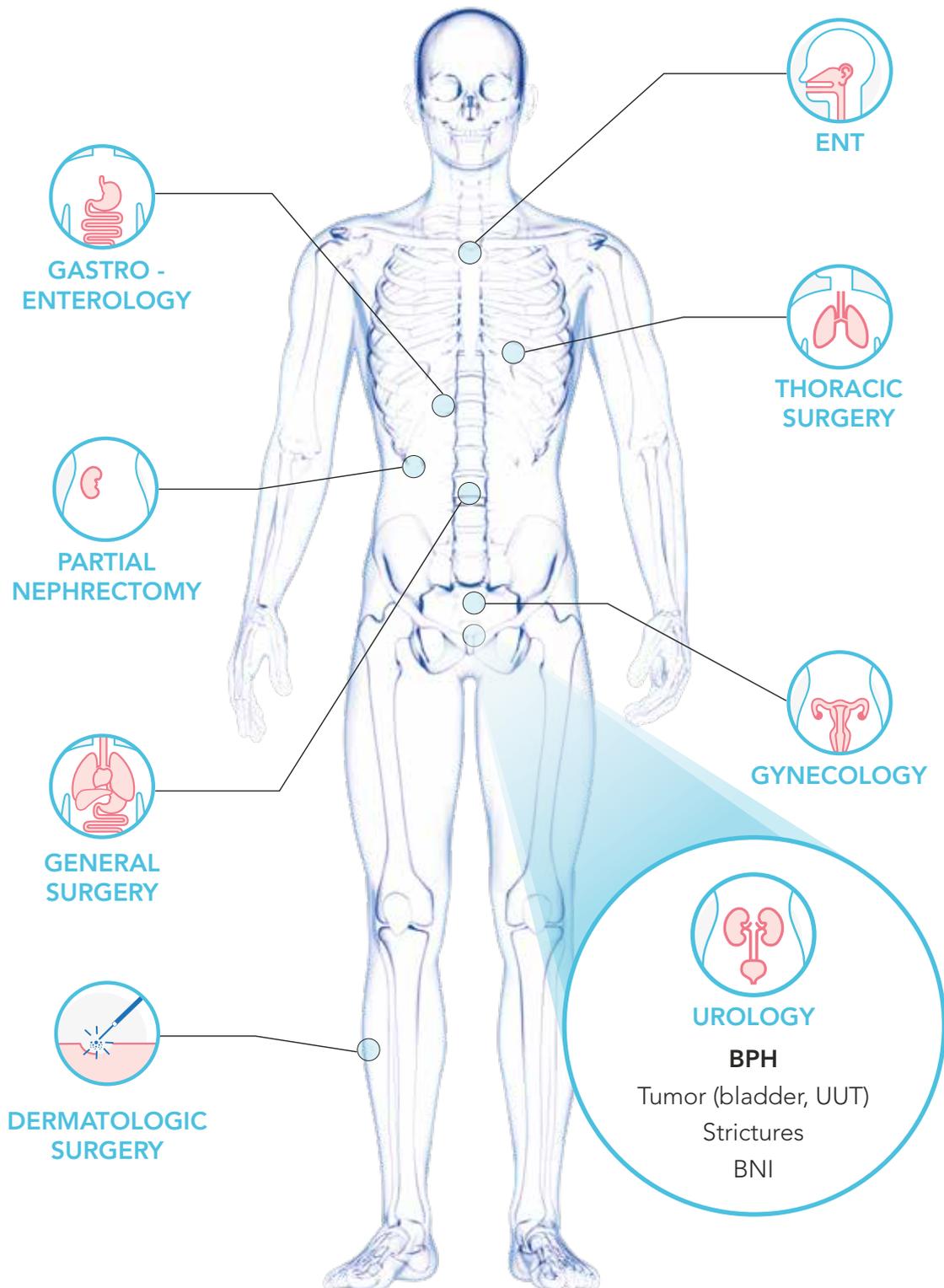


## REUSABLE FIBERS

Bare fibers can be reesterilized and reused. Based on that, Thulium allows significant expense reduction with respect to Green laser, using exclusively side-fibers (disposable only)

# Applications

**Cyber TM** can be used to perform incision, excision, resection, ablation, vaporization, coagulation and hemostasis of soft tissue in various medical specialties, including:



# Technical Specifications

<b>Wavelength</b>	2010 nm
<b>Power</b>	Up to 200 W (depending on each local clearance)
<b>Power setting</b>	Up to 200 W in 1, 2, 5 W increment steps
<b>Treatment mode</b>	Continuous wave or pulsed (min 5 ms - up to 100 Hz)
<b>Beam delivery</b>	Wide range of flexible silica frontal and side-firing fibers
<b>Aiming beam</b>	Red (650 nm) or green (532 nm) on choice, adjustable <5 mW) - Class 3R
<b>Electrical requirements</b>	230/208 Vac, single phase; 50/60 Hz; 16/18A
<b>Cooling</b>	Internal chiller
<b>Noise level</b>	Less than 58 dBA
<b>Operating temperature</b>	10°C - 30°C
<b>Humidity</b>	30% - 85% - Non condensing
<b>Dimensions and weight</b>	55 cm (W) x 75 cm (D) x 110 cm (H) - 200 kg

**VISIBLE AND INVISIBLE LASER RADIATION**

Avoid eye skin exposure to direct or scattered radiation

Laser product: Class 4

Aiming beam: Class 3R



*Note: National local authorities may put restrictions to the parameters indicated in the above table, or may limit or remove certain intended uses. Specifications are subject to change without notice.*

Quanta System products are manufactured according to the International standards and have been cleared by the most important International notified bodies.

The Company is UNI EN ISO 9001:2015 and EN ISO 13485:2016 certified. Quanta System S.p.A. was founded in 1985 and belongs to the El. En. Group (a public company listed in the Star segment of the Italian Stock Exchange) since January 2004.

The company, divided into three business units (medical, scientific and industrial) is specialized in manufacturing of laser and opto-electronic devices.

