

# HOLA<sup>®</sup> ELLA<sup>®</sup>



Minimally invasive laser therapy  
in Gynecology



For more insights



- Precise
- Excellent hemostasis
- Versatile
- Working in non-contact or contact

# biolitec® laser therapies in Gynecology

The biolitec® diode laser systems are characterized by a compact, maintenance-free design for effective and safe use in surgery. Since almost 20 years biolitec® has been developing methods and procedures in many medical disciplines and offers established and sophisticated devices with a selection of optical fibers for different applications. The laser systems used worldwide are developed in Germany at the Bonn location and are characterized by high quality and safety standards. Whether in the operating room or in the outpatient OR center, the use of biolitec® diode lasers significantly expands the spectrum of users.

In gynecology, biolitec® offers a wide range of treatment options in both hysteroscopy and laparoscopy. Myomas, polyps, dysplasia, cysts

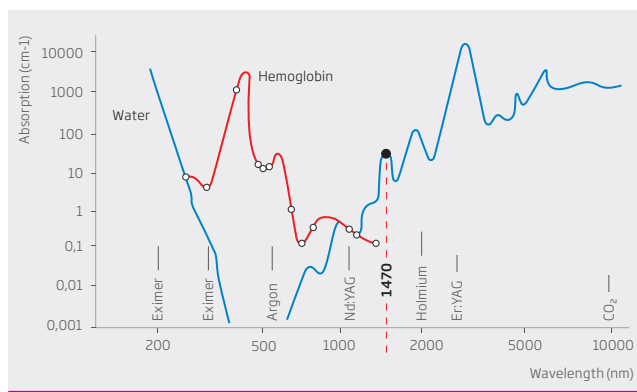
and condylomas can be treated by cutting, enucleation, vaporization and coagulation. Controlled cutting with laser light has hardly any effect on the uterine muscles and thus avoids painful contractions. The simultaneous coagulation guarantees excellent hemostasis and therefore a good view on the surgical field at all times. The defined penetration depth allows very precise and tissue-friendly working and is therefore the method of treatment with a great contribution to preserving fertility.

## **Easy to use, precise & versatile in**

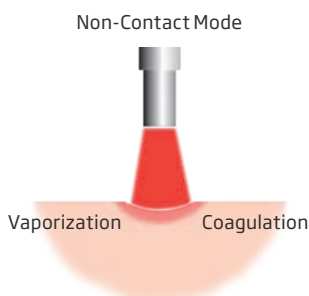
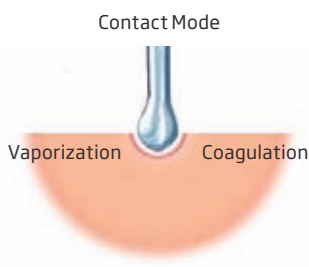
- **Hysteroscopy**
- **Laparoscopy and**
- **minimally-invasive surgery**

# “Technology meets Anatomy”

The 1470 nm/980 nm wavelengths ensure high absorption in water and hemoglobin. The thermal penetration depth is significantly lower than, for example, the thermal penetration depth with Nd:YAG lasers. These effects enable safe and precise laser applications to be performed near sensitive structures while providing thermal protection of the surrounding tissue. Compared to the CO<sub>2</sub> laser, these special wavelengths offer significantly better hemostasis and prevent major bleeding during surgery, even in hemorrhagic structures.



Absorption of laser beam in hemoglobin and water



With thin, flexible glass fibers you have very good and precise control of the laser beam. The penetration of laser energy into deep structures is avoided and surrounding tissue is not affected. Working with quartz glass fibers in non-contact and contact offers tissue-friendly cutting, coagulation and vaporization.

## LEONARDO<sup>®</sup> DUAL

### Easy

- Easy handling
- Reduced surgery time

### Safe

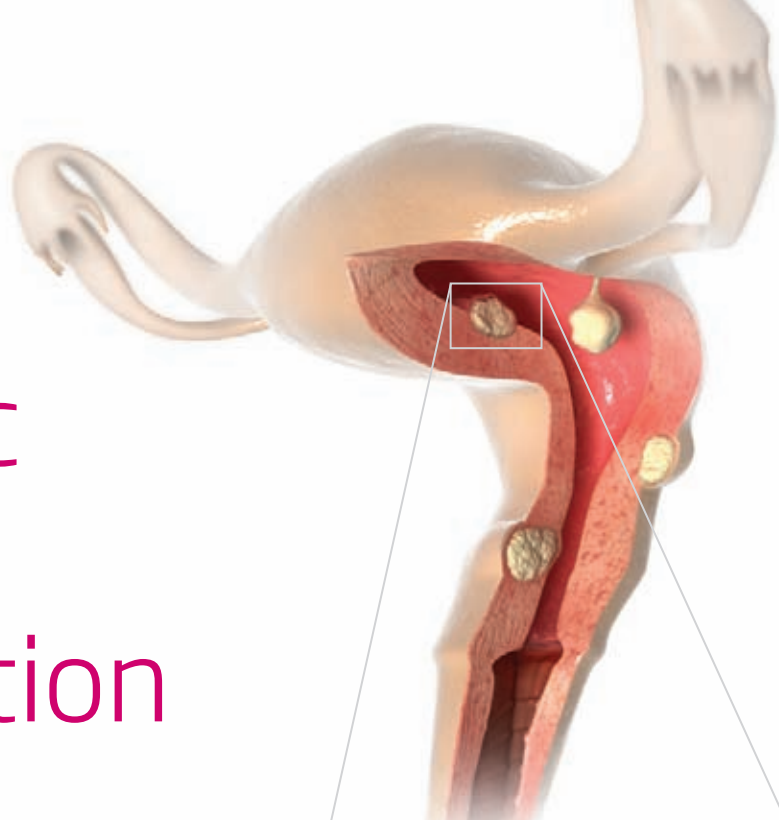
- Intuitive interface
- RFID for sterility assurance
- Defined penetration depth

### Flexible

- Contact- or non-contact with tactile feedback
- Cutting, coagulation, hemostasis

# HOLA<sup>®</sup> - Hysteroscopic Outpatient Laser Application

About one third of all women aged 30 and over is affected by myomas. The gentle and above all uterine preserving treatment of polyps and myomas is especially important for women who wish to have children. Polyps and myomas can be enucleated quickly and gently with the MyoFiber<sup>®</sup> glass fibers in a variety of designs. The use of standard diagnostic hysteroscopes with small diameter allows direct treatment during diagnosis. The laser energy avoids contraction of the uterine muscles and can therefore be used without or under minimal local anesthesia. In addition, in the treatment of the uterine septum, the laser may be a more conservative technique that can maintain the muscular integrity of the uterus without weakening the myometrium. This can be a great advantage in women who wish to have children after surgical treatment.



Enucleation of a myoma with MyoFiber<sup>®</sup> CC

## Advantages

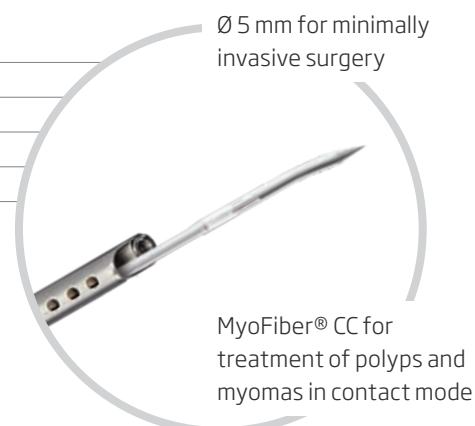
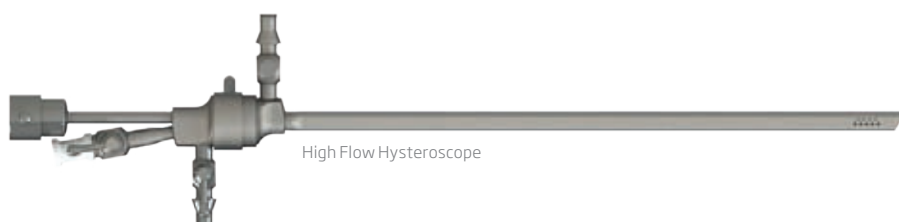
- Safe working in saline solution
- Outpatient possible without anesthesia
- Use of standard instruments
- Almost painless for patients

## Applications

- Polyp
- Myoma
- Septum
- Isthmocele

## Instruments and fibers

REF	Product
400500300	Hysteroscope SET working channel 5Fr. continuous flow for optics 30°, 300 mm
400500130	ASAP Hysteroscope optics HD, 2.9mm, 30°, 300 mm
503200760	MyoFiber <sup>®</sup> CC, IC
503200770	MyoFiber <sup>®</sup> CA, IC



# ELLA® - Endometriosis Laparoscopic Laser Application

Endometriosis is one of the main causes in women with abdominal pain and of unfulfilled desire to have children. In women with symptoms, the primary goal is the laparoscopic removal of endometriosis lesions. Laser energy, delivered via the glass fiber optic, is used to precisely remove endometriosis lesions. Especially the resection of ovarian cysts is particularly gentle. First results of a study confirm the rapid recovery of the AMH value and the significant maintenance of the ovarian reserve.

## Advantages

- Working in non-contact or contact with tactile feedback
- Defined penetration depth without impact on surrounding tissue
- Preservation of ovarian reserve and fertility
- Excellent hemostasis
- Reduced scarring and avoidance of adhesions

## Applications

- Deep Infiltrating Endometriosis
- Ovarian Endometriomas
- Adhesiolyses
- Salpingectomy
- Ovarian Cysts
- Twin-to-twin Syndrome TTTS



Endometriosis, ovarian cyst

## Instruments and fibers

REF	Product
400400110	Laparoscopic sheath 30 cm
400400115	Laparoscopic sheath 40 cm
503200600	ELLA® Click Fiber, IC
503200775	MyoFiber® CS, IC



ELLA® Click Fiber and Laparoscopic sheath

Get maximum security with ELLA® Click Fiber

Laparoscopic sheath Ø 5 mm for all standard trocars



ELLA® Click Fiber for vaporization and excellent hemostasis

# Minimally-invasive surgery

Laser surgery is also excellently suited for the treatment of condylomas or dysplasia in the areas of vulva, vagina and cervix. During these treatments, laser energy, delivered via the glass fiber optic, replaces the scalpel with the added benefit of excellent vaporization and hemostasis. The defined penetration depth of the laser energy is less invasive, leading to fewer complications and a quick recovery of the patients.



Condylomata acuminata

## Advantages

- Precise cutting and coagulation
- Short rehabilitation time
- Optimal protection of surrounding tissue
- Almost blood-free procedure

## Applications

- Condyloma
- Cervical Ectropion
- Vulvar and Cervical Dysplasia

## Instruments and fibers

REF	Product
400100100	UNIVERSAL DUAL LUER HANDPIECE for Myofiber CS
503200775	Myofiber CS, IC
AB2594	Biopsy Needle
503200970	LOMA Focus Handpiece



Universal Dual Luer Handpiece



LOMA Focus Handpiece

# LEONARDO®

One device for multiple applications  
in Gynecology

## LEONARDO® DUAL 45

The complete solution  
for gynecology and more



## LEONARDO® Mini

For hysteroscopy  
and condylomas



## LEONARDO®

**LEONARDO® DUAL 45**

INVISIBLE LASER RADIATION  
AVOID EYE OR SKIN EXPOSURE TO  
DIRECT OR INDIRECT RADIATION

**CLASS 4 LASER PRODUCT**  
Diode-Laser 980 +/- 30 nm CW 30 W (Max.)  
Diode-Laser 1470 +/- 30 nm CW 15 W (Max.)  
EN 60825-1:2008 EN 60601-2-22:2007

VISIBLE LASER RADIATION  
AVOID EYE EXPOSURE TO DIRECT RADIATION

**CLASS 3R LASER PRODUCT**  
Diode-Laser 635 +/- 10 nm CW 4 mW (Max.) (Aiming)  
Diode-Laser 532 +/- 10 nm CW 1 mW (Max.) (Aiming)  
EN 60825-1:2008 EN 60601-2-22:2007

**LEONARDO® Mini Dual**

INVISIBLE LASER RADIATION  
AVOID EYE OR SKIN EXPOSURE TO  
DIRECT OR INDIRECT RADIATION

**CLASS 4 LASER PRODUCT**  
Diode-Laser 980 +/- 30 nm CW 13 W (Max.)  
Diode-Laser 1470 +/- 30 nm CW 4 W (Max.)  
EN 60825-1:2007 EN 60601-2-22:2007

VISIBLE LASER RADIATION  
AVOID EYE EXPOSURE TO DIRECT RADIATION

**CLASS 3R LASER PRODUCT**  
Diode-Laser 635 +/- 10 nm CW 4 mW (Max.) (Aiming)  
IEC 60825-1:2007 IEC 60601-2-22:2007



**CE** 1984

**CeramOptec GmbH**  
Siemensstr. 44, D-53123 Bonn

Model	LEONARDO® Mini Dual	LEONARDO® DUAL 45
REF	SL980 + 1470 nm 16 W	SL980 + 1470 nm 45 W
Wavelength	980 nm and 1470 nm	980 nm and 1470 nm
Power	11 W (980 nm) / 5 W (1470 nm)	45 Watt (1470 nm / 15 Watt + 980 nm / 30 Watt), separately adjustable
Fiber diameter	≥ 360 µm	≥ 360 µm
Aiming beam	635 nm, max. 4 mW	532 nm and 635 nm, green 1 mW, red 4 mW, user controlled intensity
Treatment mode	CW, Pulse Mode (optional)	CW, Pulse Mode, ELVeS® Signal, ELVeS® Segment, Derma Mode
Pulse duration /-break	0.01 – 60 sec / 0.01 – 60 sec	0.01 – CW / 0.01 – 60 sec
Power supply	110 – 240 VAC, 50 – 60 Hz (12 VDC Max 65 VA)	110 – 240 VAC, 50 / 60 Hz, 450 VA
Batteries	Li-ion batteries	–
Dimensions (H x W x D)	6.0 cm x 9.0 cm x 21.5 cm	approx. 28 cm x 37 cm x 9 cm
Weight	900 g	approx. 8.5 kg

All laser sets incl. 3 safety goggles, foot switch, interlock connector, power cord and manual in a carrying case.

# Contact us

to learn more about a whole new world  
of minimally invasive laser therapies

For more insights



- Venous diseases
- Hemorrhoids and fistulas
- Wide spectrum of ENT diseases
- BPH and urological tumors
- Uterine tumors
- Cervical and lumbar disc herniation
- Lung metastases and bronchial tumors

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All fibers are free of latex and DEHP. Our fibers are single use products (unless otherwise indicated) delivered sterile for immediate use.

### **Imprint**

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