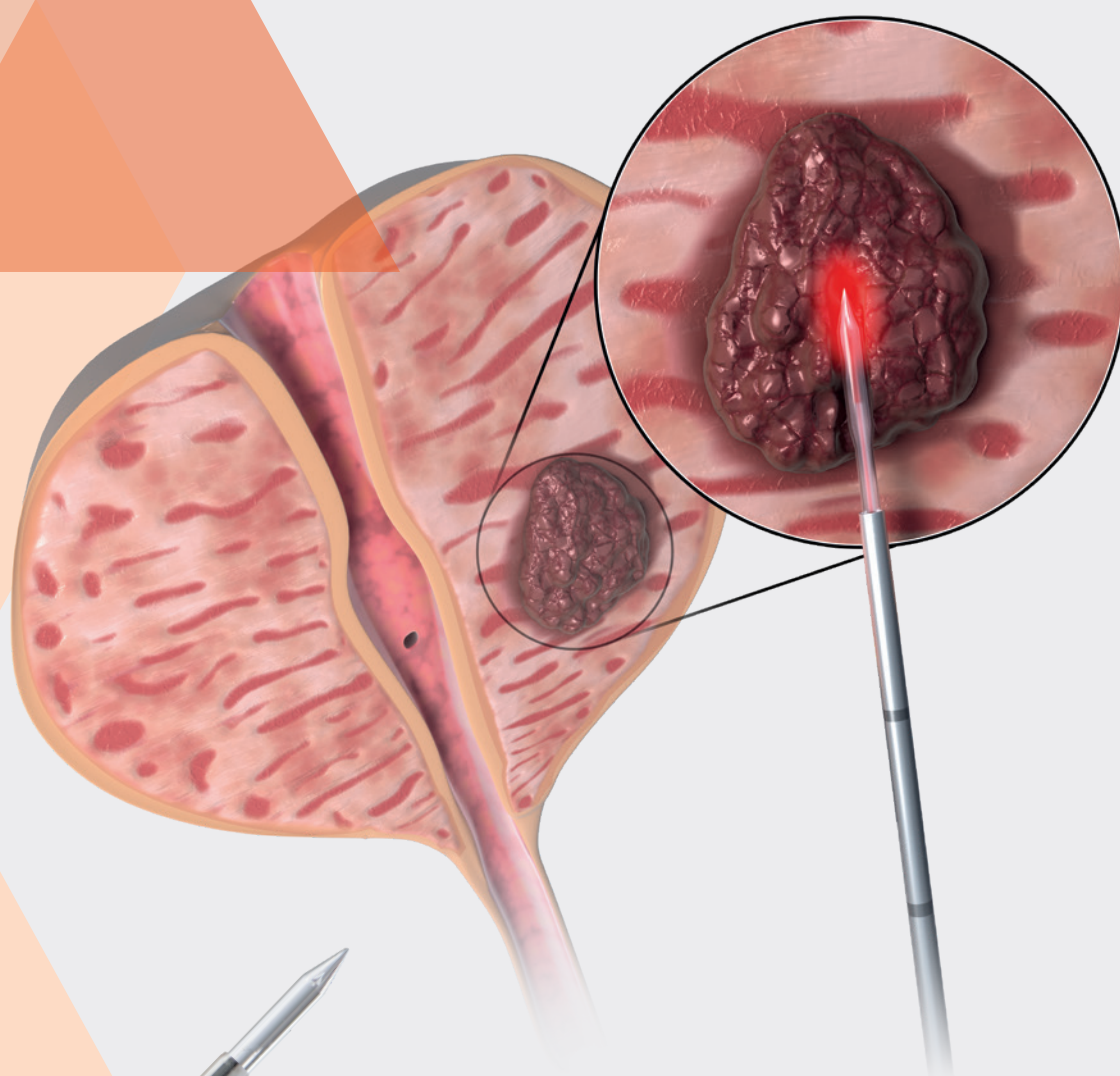


Focal Laser Ablation

FLA Therapy of Prostate Tumors

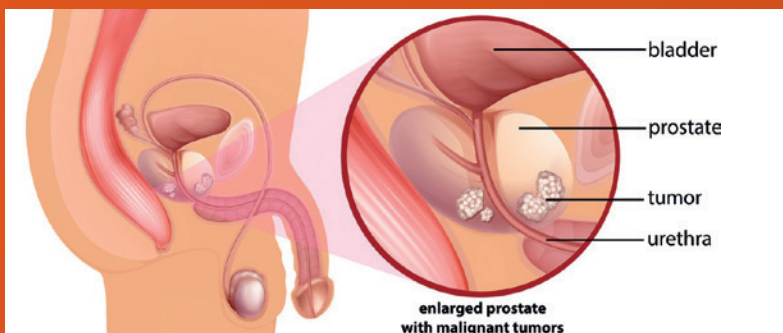


- MRI-guided laser ablation with thermometry
- Quick & safe procedure
- Well defined, controlled olive-shaped ablation
- Protects vital & sensitive structures

A new dimension in the treatment of prostate tumors

No collateral damage to sensitive structures

The combination of real-time Magnetic Resonance Imaging (MRI) with Focal Laser Ablation (FLA) has led to a new and higher quality of prostate tumor treatment. Patients diagnosed with low to intermediate localized prostate tumors can be treated safely and precisely with no collateral damage to the adjacent structures with Focal Laser Ablation (FLA).



Example for location of a prostate tumor (© fotolia/blueringmedia)

Advantages

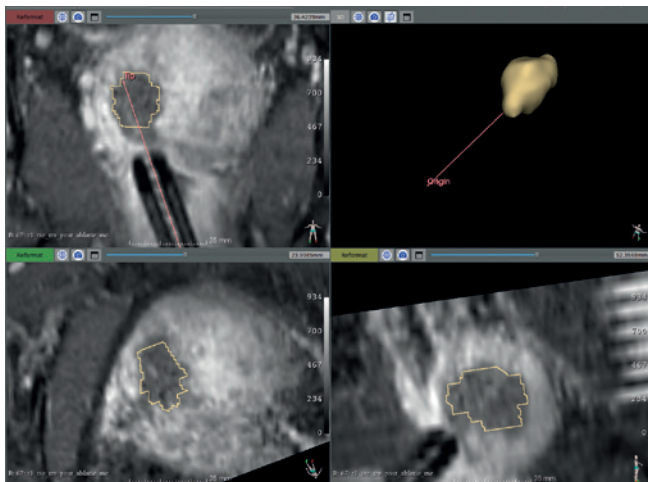
biolitec® FLA of Prostate Tumors

- Right penetration depth and energy absorption
- Protects critical structures around the prostate gland
- MRI compatible Litt fibers with different ablation zones
- Procedure can be performed under local anesthesia
- Shorter hospital stay
- Laser ablation can be repeated for recurring tumors

How is the intervention done?

Transrectal or transperineal approach

1. After the confirmed diagnosis with PSA blood tests, MRI scans and prostate biopsy, the Focal Laser Ablation is performed under real-time MRI Guidance & Thermometry with the FLA Litt fibers by biolitec®
2. The Litt fiber is gently introduced and positioned into the core of the low to intermediate localized prostate tumors
3. The LEONARDO® Dual 45 laser and the Litt fiber deliver the energy to destroy the tumor in an olive-shaped ablation zone within minutes

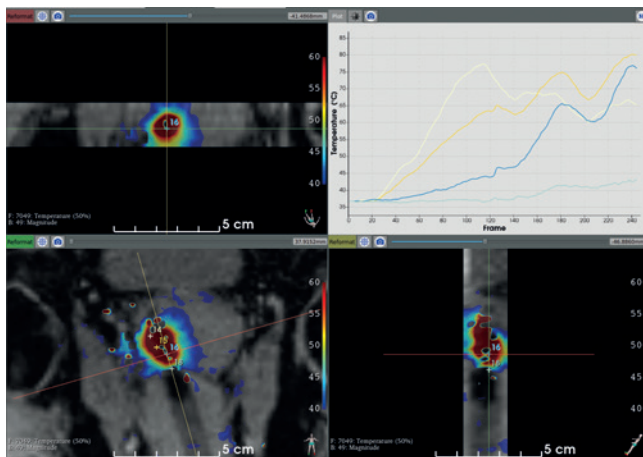


**Post-Contrast
T1-weighted image
for thermal lesion
confirmation**

Images courtesy of Certis Therapeutics

Safety & precision

The Leonardo laser along with the specially designed Litt fiber produces well defined ablation to treat prostate tumors. A real time thermometry solution empowers clinicians with the next generation MRI-Guided Thermal Ablation. Certis Therapeutics with their advanced software provide solutions to monitor thermal energy under MRI Intervention with an unprecedented accuracy. The Certis software thermometry offers a complete solution for real-time MRI guided thermal ablations with utmost safety and precision in treating prostate tumors.



Temperature mapping during laser treatment

Thermometry during FLA with the biolitec® Litt laser fiber (relative temperature scale)

Darkblue	< 40°
Lightblue	40 - 45°
Green	45 - 50°
Yellow	50 - 55°
Orange	55 - 60°

The real-time MRI Mapping & Thermometry confirms the right and safe ablation during the laser procedure. The MRI scan shows proper destruction of tumor with sufficient safety margins.

The MRI-Focal Laser Ablation can be done either with a needle guide positioning (manual technique) or with a robotic needle guide positioning technique such as Soteria's Remote Controlled Manipulator (RCM; optional).



The RCM positioned for treatment (© Soteria Medical BV Arnhem, The Netherlands)

"I have used the biolitec® LEONARDO® Dual laser and the specially designed MRI compatible FLA Litt fibers since 2017. This is a special combination of precise and controlled technique for Focal Laser Ablation of Prostate Tumors. It helps to protect the vital structure from damage by minimizing the thermal spread, and at the same time achieve a safe and efficient ablation. biolitec® gives me this precision!"

Jurgen Fütterer MD PhD, Interventional Radiologist at Radboudumc, Nijmegen, and full professor at the Robotics and Mechatronics group, University of Twente, The Netherlands

Our products





LEONARDO®

Model	LEONARDO® DUAL 45
REF	SL980 + 1470nm45W
Wavelength	980 nm and 1470 nm
Power	max. 45 Watt (1470 nm/ 15 Watt + 980 nm/ 30 Watt) separately adjustable
Fiber diameter	≥ 360 µm
Aiming beam	532 nm and 635 nm, green 1 mW, red 4 mW, user controlled intensity
Treatment mode	CW, Pulse Mode, ELVeS® Signal, ELVeS® Segment, Derma Mode
Pulse duration /-break	0.01 – 60 sec / 0.01 – 60 sec
Power supply	110 – 240 VAC, 50 / 60 Hz, 450 VA
Batteries	-
Dimensions (H x W x D)	approx. 28 cm x 37 cm x 9 cm
Weight	approx. 8.5 kg

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

Litt fibers

REF	Product	PU [Packaging unit]	length [m]	ø fiber [mm]	Ablation shape
503200270	Litt2B fiber	5	10	1.85	 olive
503200280	Litt3B fiber	5	10	1.85	 olive

Certis Therapeutics

REF	Product	Description
CT-STK-1	Certis Solution Starter Kit	(laptop or mini desk) 32Gb PC with high-end graphic card MRI connection and parameters optimization
CT-SFW-1.X	Certis Solution Annual License	12 months software license Includes upgrades Includes maintenance and online support



Contact us

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



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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.

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