

vela™ XL

120-Watt Thulium Laser

**Boston
Scientific**
Advancing science for life™

The New Wave in Urology



StarMedTec is a wholly owned indirect subsidiary of Boston Scientific.

* Not currently marketed in the US.

Boston Scientific is pleased to announce the addition of StarMedTec to our portfolio of products. For more than twenty years, StarMedTec – Starnberg, Germany – has been an innovator and technology leader in the medical laser industry. Their next generation of Holmium lasers – Auriga QI™ 30W Laser & Auriga™ XL 50W Laser – and 1.9 micron Thulium lasers – vela™ QI 30W Laser and vela XL 120W Laser – are designed to give physicians and hospitals a powerful and reliable console to help improve their patients' quality of life.

We look forward to combining our world-class single-use products with StarMedTec's laser technology to offer our customers throughout the world a best-in-class solution for all their stone management needs.

For more information about StarMedTec's laser consoles, please visit www.starmedtec.com.

For more information about Boston Scientific's urology solutions, please visit www.bostonscientificstone.com.

The Worldwide Urology Solution

Holmium Lasers



Auriga QI 30W & Auriga XL 50W
Holmium Lasers

Thulium Lasers



vela QI 30W & vela XL 120W
Thulium Lasers



Access



Dilatation



Stone Retrieval



Drainage

The Mission of the Boston Scientific Urology and Women's Health Division is to be the partner of choice for innovative medical devices and efficient health care solutions that improve the quality of patients' lives.

vela™ XL

120-Watt Thulium Laser

The vela XL Laser is a continuous wave thulium laser that uses an optimized 1.94µm wavelength. This powerful, highly precise laser is designed for hemostatic cutting or ablation of soft and hard tissue.



Versatile

The vela XL Laser is a high-performance thulium laser that is designed for various urological procedures.

BPH:

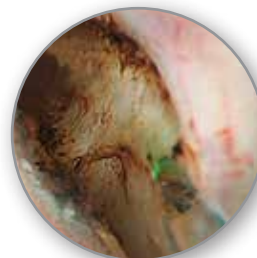
- Enucleation
- Ablation
- Vaporesection
- Transurethral incision of the prostate (TUIP)
- Bladder neck incision (BNI)

Other Endourological Applications:

- Tumor resection
- Partial nephrectomy
- Urethra and ureter strictures
- Condylomas

CoolCut™ Technology

The vela XL Laser with the CoolCut™ Technology function is designed to reduce the thermal impact on the treated tissue by applying specially designed pulse sequences.



Prostate Treatment
WITHOUT
CoolCut Technology (80W)
(vela XL Laser)



Prostate Treatment
WITH
CoolCut Technology (80W)
(vela XL Laser)

Surgical photos courtesy of Prof. Thomas Knoll, MD, PHD, MSC.
Example photos from one patient case, results are not necessarily predictive of results in other cases. Results in other cases may vary.

Powerful Yet Precise

120-Watt Output

With its high absorption in water and defined coagulation depth, the 120-watt vela™ XL Laser is designed to safely and effectively cut or vaporize tissue.

1.94µm Wavelength (Figure 1)

- Biological tissue is composed mainly of water, which has a 1.94µm absorption peak.¹
- The vela XL Laser 1.94µm wavelength was designed to match the 1.94µm absorption peak of water in order to facilitate tissue cutting and vaporization.¹

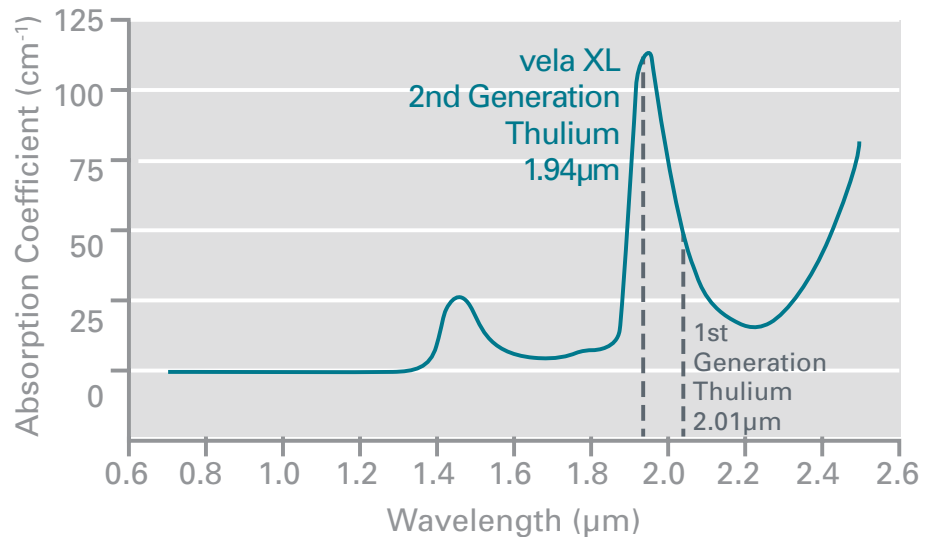


Figure 1: Water absorption curve near 1.94µm peak. Absorption coefficient for water is 114cm⁻¹ at thulium wavelength of 1.94µm.¹

Coagulation Depth (Figure 2)

- Thulium's approximate 0.2mm depth of tissue penetration is the lowest among urology surgical lasers tested.¹
- 0.2mm is a reasonable depth for sufficient homeostasis with minimal thermal injury to surrounding tissue.³

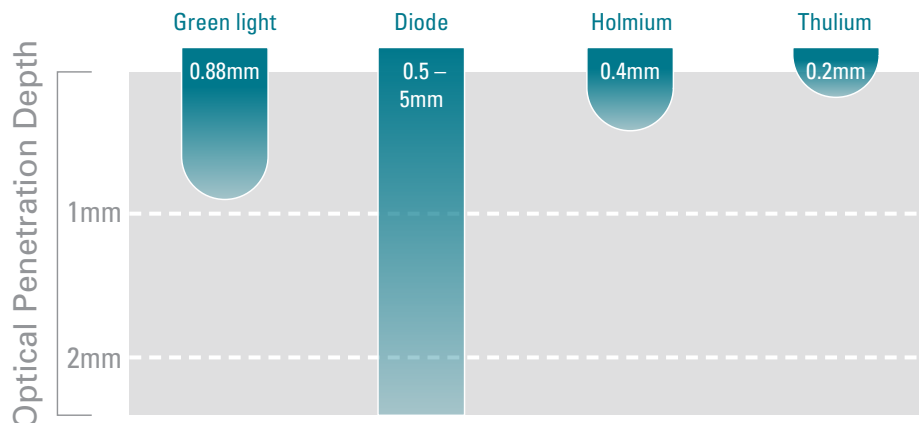


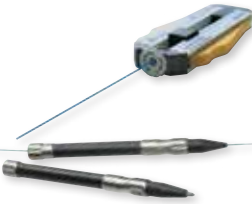


Figure 2: Optical penetration depth of different lasers in prostate tissue.²

vela XL Laser Benefits:

- Powerful 120-watt design for speed and hemostasis
- 1.94µm thulium wavelength designed for peak absorption in water
- 0.2mm penetration depth
- Continuous wave duration
- Ability to ablate, enucleate and resect
- CoolCut™ Technology
- Used with clear glasses (not orange) to aid with visualization



Ordering Information		Item Number	Description	Units
Thulium Laser				
	4101	vela™ XL Laser 120-Watt Thulium Laser	Each	
	6100	Laser Protection Glasses Dyna Guard	Each	
Laser Fibers				
	6450	LightTrail™ Single-Use Laser Fiber, 230µm	Each	
	6464	LightTrail Single-Use Laser Fiber, 270µm	Each	
	6452	LightTrail Single-Use Laser Fiber, 365µm	Each	
	6454	LightTrail Single-Use Laser Fiber, 600µm	Each	
	6456	LightTrail Single-Use Laser Fiber, 800µm	Each	
	6451	LightTrail Reusable Laser Fiber, 230µm	Each	
	6463	LightTrail Reusable Laser Fiber, 270µm	Each	
	6453	LightTrail Reusable Laser Fiber, 365µm	Each	
	6455	LightTrail Reusable Laser Fiber, 600µm	Each	
	6457	LightTrail Reusable Laser Fiber, 800µm	Each	
Accessories				
	91023012/W	Fiber Stripper Adjustable	Each	
	72220-012/B	Diamond Cutter, Diamond Cutter Cleaving Tool	Each	
	40001042	Power Cord VDE, CSA 16A	Each	
	40001101	Door Interlock Plug	Each	
	40001102	Key Set	Each	
	41011045	Foot Pedal with Attached Cable	Each	

Technical Data *	
Laser Data	
Laser type	Thulium laser
Wavelength	1.94µm
Output (max.)	5–120W
Pulse duration	1msec-cw
Pilot beam, green	532nm, <1mW, adjustable in small increments
Device Data	
Mains supply	220–240V 50Hz; 200–230V 60Hz; 16A (max. 3kW)
Display	WVA (wide view angle) color display
Cooling	Closed cooling system
Dimensions (w x d x h)	30cm x 95cm x 105cm (11.8 x 37.4 x 41.3 inches)
Weight	150kg (330.7lbs)
Fibers	230–800µm LightTrail Fibers
Standards	
Laser class	4

* Changes to the technical data reserved



Not currently marketed in the US.

*Data on file. Bench test results may not necessarily be indicative of clinical performance.

¹ Fried NM, Murray KE. New technologies in endourology, high-power thulium fiber laser ablation of urinary tissues at 1.94 microm. J Endourol. 2005;19:25-31.

² Rieken M, Bachmann A. Laser treatment of benign prostate enlargement—which laser for which prostate? Nat Rev Urol. 2014;11:142-52.

³ Yang, Zhonghua. Thulium Laser Enucleation vs. Plasmakinetic Resection of the Prostate: A Randomized Prospective Trial With 18-Month Follow-Up. Prostatic Disease and Male Voiding Dysfunction. 2013; Urology 81 (2).

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CAUTION: Law restricts this device to sale by or on the order of a physician. Indications, contraindications, precautions and warnings can be found with product labeling.

CAUTION: Federal (U.S.) law restricts this device to sale by or on the order of a physician. Refer to user manual provided with the product for complete Indications for Use, Contraindications, Warnings, Precautions, Adverse Events, and Instructions prior to using this product.

**Boston
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