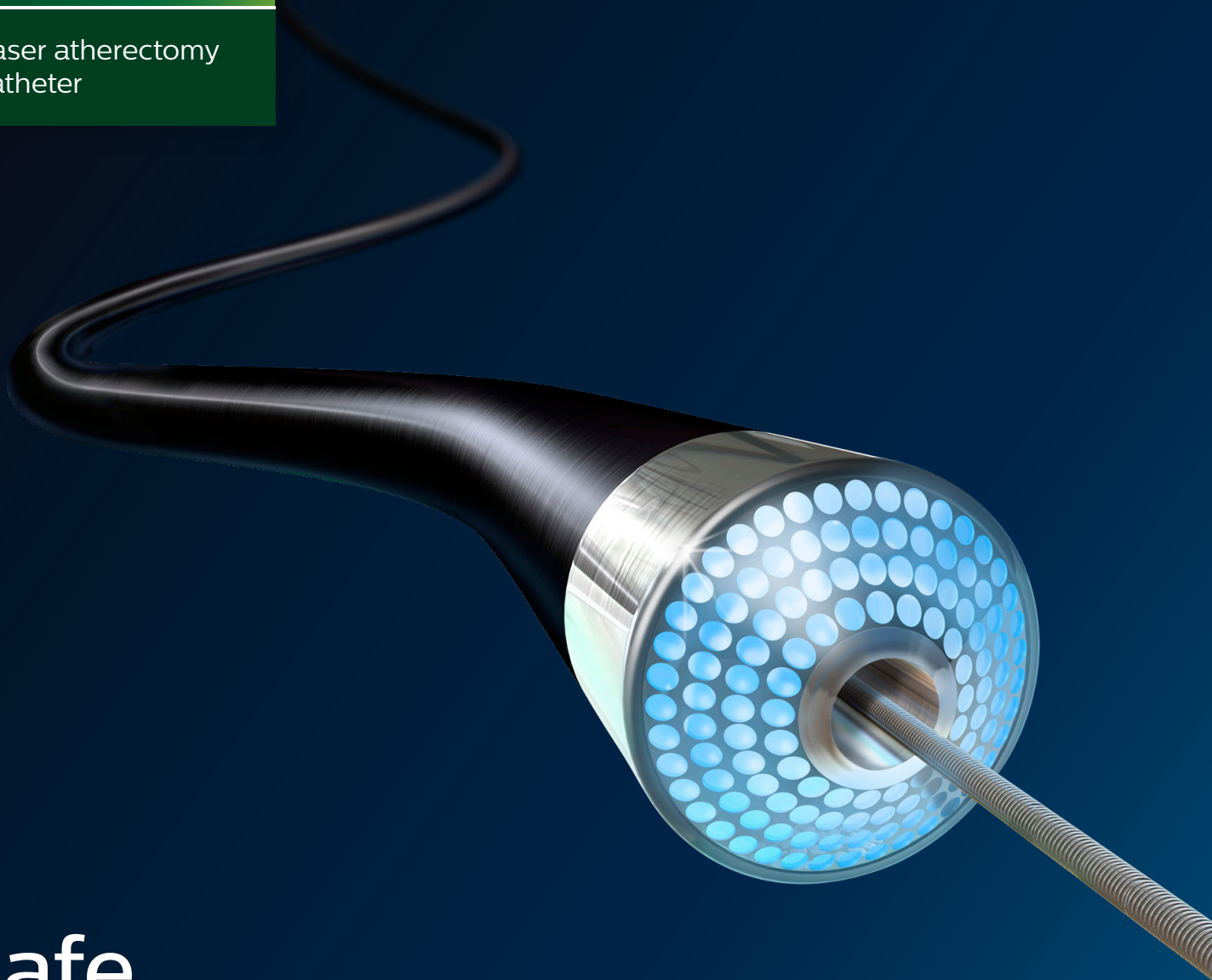


**PHILIPS**

*Turbo-Elite*

Laser atherectomy  
catheter



Safe.  
Effective.  
Proven.

# The safe and versatile way to cross, prepare and preserve vessels above and below the knee

The Philips Turbo-Elite laser atherectomy catheter captures the power of ultraviolet light to provide a versatile and reliable tool for treating multiple lesion morphologies. By working at the molecular level, Turbo-Elite is capable of powering through challenging infrainguinal stenoses and occlusions, providing you the precision and control required to preserve vessels and save limbs.

## Versatile performance

Turbo-Elite uniformly and reliably treats a variety of morphologies and locations with a single catheter.

## Cross and debulk with one device

The safe and proven step-by-step method enables Turbo-Elite to cross challenging occlusions without a wire by acting directly from the catheter's tip.

## Reliably simple

With its safe and easy-to-use technology, Turbo-Elite provides laser-accurate control with none of the moving parts or cutting blades of competing atherectomy catheters.

## Strong clinical support

Turbo-Elite has a proven record of safety and efficacy with results that consistently demonstrate an ability to save limbs and treat lesions both above and below the knee.<sup>1</sup>

## Laser MOA: Photoablation



**Light pulse** ablates mixed morphologies at a molecular level and is safe for all lesion types.



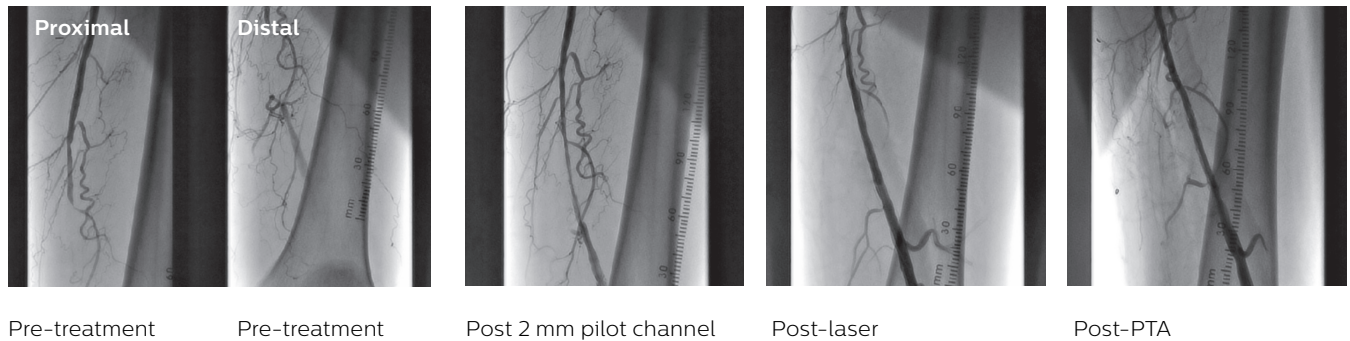
**Sonic wave** impacts hard materials, may affect vessel compliance and affects both luminal and medial disease.



**Vapor bubble** debulks mixed morphologies and macerates materials for luminal gain.

## Enhanced performance and effectiveness

Turbo-Elite successfully re-canalizes a total occlusion of the SFA.



Images provided courtesy of Dr. David Allie

### Cost-effective atherectomy solution

Through a single device that can both cross and debulk a lesion, Turbo-Elite provides you with clinical effectiveness and reliability.

### Clinical support and expertise

Philips offers exceptional training and support, including observational training, symposia and atherectomy simulators.

Turbo-Elite laser atherectomy catheter: the **safe, effective and easy** way to treat compromised vessels above and below the knee.



# Turbo-Elite laser atherectomy catheter

## Peripheral over-the wire (OTW) catheters

<b>Catheter diameter</b>	0.9 mm	1.4 mm	1.7 mm	2.0 mm	2.3 mm	2.5 mm	2.3 mm	2.5 mm
<b>Model number</b>	410-152	414-151	417-152	420-006	423-001	425-011	423-135	425-135
<b>Vessel diameter</b>	≥1.4 mm	≥2.1 mm	≥2.6 mm	≥3.0 mm	≥3.5 mm	≥3.8 mm	≥3.5 mm	≥3.8 mm
<b>Max guidewire compatibility</b>	0.014"	0.014"	0.018"	0.018"	0.018"	0.018"	0.035"	0.035"
<b>Sheath compatibility</b>	4F	5F	5F	6F	7F	8F	7F	8F
<b>Max tip outer diameter</b>	0.038"	0.055"	0.068"	0.080"	0.091"	0.101"	0.091"	0.101"
<b>Max shaft outer diameter</b>	0.047"	0.056"	0.069"	0.081"	0.091"	0.102"	0.091"	0.102"
<b>Working length</b>	150 cm	150 cm	150 cm	150 cm	120 cm	110 cm	125 cm	112 cm
<b>Fluence (mJ/mm<sup>2</sup>)</b>	30-80	30-60	30-60	30-60	30-60	30-45	30-60	30-60
<b>Repetition rate (Hz)</b>	25-80	25-80	25-80	25-80	25-80	25-80	25-80	25-80

## Peripheral rapid exchange (RX) catheters

<b>Catheter diameter</b>	0.9 mm	1.4 mm	1.7 mm	2.0 mm
<b>Model number</b>	410-154	414-159	417-156	420-159
<b>Vessel diameter</b>	≥1.4 mm	≥2.1 mm	≥2.6 mm	≥3.0 mm
<b>Max guidewire compatibility</b>	0.014"	0.014"	0.014"	0.014"
<b>Sheath compatibility</b>	4F	5F	6F	7F
<b>Max tip outer diameter</b>	0.038"	0.057"	0.069"	0.080"
<b>Max shaft outer diameter</b>	0.049"	0.062"	0.072"	0.084"
<b>Working length</b>	150 cm	150 cm	150 cm	150 cm
<b>Fluence (mJ/mm<sup>2</sup>)</b>	30-80	30-60	30-60	30-60
<b>Repetition rate (Hz)</b>	25-80	25-80	25-80	25-80

1. Dippel EJ, Makam P, Kovach R, et al. Randomized controlled study of excimer laser atherectomy for treatment of femoropopliteal in-stent restenosis: initial results from the EXCITE ISR trial (EXCimer Laser Randomized Controlled Study for Treatment of Femoropopliteal In-Stent Restenosis). JACC Cardiovasc Interv. 2015;8(1 Pt A):92-101.

