

# ClosureFast™

Endovenous  
Radiofrequency  
Ablation (RFA)  
Procedure



**PROVEN  
RESULTS  
RAPID  
RECOVERY**

A treatment with proven results—demonstrated year after year.<sup>1-4</sup>

	3 months	6 months	1 Year	2 Years	3 Years	5 Years
Vein Occlusion <sup>1,2</sup>	99.7%	98.6%	96.3%	94.5%	92.6%	91.9%
No Reflux <sup>1,2</sup>	99.7%	99.3%	99.0%	94.5%	95.7%	94.9%

## Proven Results

The ClosureFast™ procedure—in a large, multi-center, prospective trial—demonstrated the following results at 5 years:<sup>1,2,\*</sup>

- **91.9%** occlusion rate
- **94.9%** reflux-free rate

## Proven Patient Recovery

The ClosureFast catheter demonstrated high success rates and long-lasting relief from pain in over 200 patients across 8 centers at 3 years:<sup>2\*</sup>

- *CEAP (classification system)*: **74.1%** showed improvement
- *Venous Clinical Severity Score (VCSS)*: reduction in mean score from **3.9 to 0.9 (p>0.05)**
- *Pain*: increase in percentage of patients free of pain from **41.1% to 98%**

## COMPARISON: Radiofrequency vs. Laser Ablation

### Consistent and Controlled

- ClosureFast catheter's segmental approach eliminates the need for continuous pull-back of the energy source
- Allows controlled and repeatable radiofrequency ablation

### Optimal Therapeutic Power

- RFA delivers a lower heat gradient of energy at around 120°C
- Laser treatments can reach temperatures of over 700°C<sup>5</sup>

### Improved Patient Comfort

In a head-to-head study, ClosureFast procedure patients experienced less pain, less bruising, and a faster recovery than patients treated with 980 nm laser ablation.<sup>3</sup>

# CONSISTENT MECHANISM OF ACTION

The ClosureFast™ procedure allows consistent, controlled thermal ablation for precise and effective treatment.<sup>†</sup>

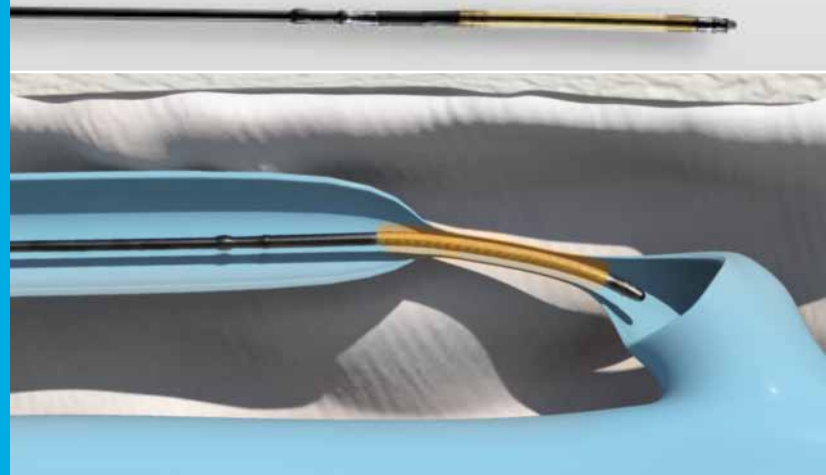
- The ClosureFast catheter heats a 7 or 3 cm vein segment in one 20-second interval.<sup>†</sup>
- The system's controlled feedback mechanism monitors intravascular heat parameters in real time to automatically regulate therapeutic power.
- The heat provided by the catheter shrinks and collapses the vein, over time creating a fibrotic seal and occluding the vessel.

ClosureFast 7 cm Catheter



SHOWN AT ACTUAL SIZE

ClosureFast 3 cm Catheter<sup>‡</sup>



\*For 7 cm RF catheter.

†Data on file.

‡All clinical data presented is conducted with the ClosureFast 7 cm catheter.

**REFERENCES:** <sup>1</sup>Proebstle TM, Alm BJ, Gockeritz O et al. Five-year results from the prospective European multicentre cohort study on radiofrequency segmental thermal ablation for incompetent great saphenous veins. *British Journal of Surgery*. 2015;102:212-8. <sup>2</sup>Proebstle T, Alm J, Gockeritz O, et al. Three year European follow-up endovenous radiofrequency thermal ablation of the great saphenous vein with or without treatment of calf varicosities. *J Vasc Surg*. 2011;54(1):146-52. <sup>3</sup>Almeida JI, Kaufman J, Goekeritz O, et al. Radiofrequency Endovenous ClosureFAST versus Laser Ablation for the Treatment of Great Saphenous Reflux: A Multicenter, Single-Blinded, Randomized Study (Recovery Study). *JVIR* June 2009. <sup>4</sup>L. H. Rasmussen, M. Lawaetz, L. Bjoern, B. Vennits, A. Blemings and B. Eklof. Randomized Clinical Trial Comparing Endovenous Laser Ablation, Radiofrequency Ablation, Foam Sclerotherapy and Surgical Stripping for Great Saphenous Varicose Veins. *British Journal of Surgery Society Ltd., Wiley Online Library*. www.bjs.co.uk, March 15, 2011. <sup>5</sup>Weiss RA. Comparison of Endovenous Radiofrequency Versus 810 nm Diode Laser Occlusion of Large Veins in an Animal Model. *Dermatol Surg*. 2002 Jan;28(1):56-61.

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**CAUTION:** Federal (USA) law restricts this device to sale by or on the order of a physician. **IMPORTANT:** Please reference the Instructions For Use (IFU) for a complete listing of indications, contraindications, warnings and precautions, adverse effects and suggested procedure.