ClosureFast™
Endovenous Radiofrequency Ablation (RFA) Procedure

PROVEN RESULTS RAPID RECOVERY

A treatment with proven results—demonstrated year after year.[1-4]

	3 months	6 months	1 Year	2 Years	3 Years	5 Years
Vein Occlusion[1,2]	99.7%	98.6%	96.3%	94.5%	92.6%	91.9%
No Reflux[1,2]	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:[1,2,*]

- **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:[2*]

- *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[5]

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.[3]

Medtronic
Further, Together

CONSISTENT MECHANISM OF ACTION

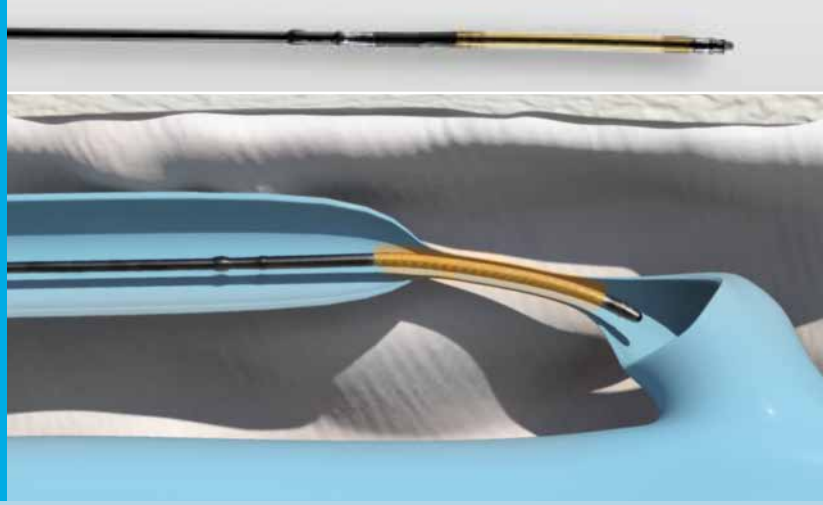
The ClosureFast™ procedure allows consistent, controlled thermal ablation for precise and effective treatment.†

- The ClosureFast catheter heats a 7 or 3 cm vein segment in one 20-second interval.†
- 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‡



*For 7 cm RF catheter.

†Data on file.

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

REFERENCES: [1]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. [2]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. [3]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. [4]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. [5]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.

Medtronic

Aortic | Peripheral | endoVenous
3033 Campus Drive, N550
Plymouth, MN 55441
USA

24-hour Technical Support
Toll free: +1.800.328.2518

Orders
Toll free: +1.800.962.9888
Fax: +1.800.734.1324

endoVenous Customer Service
Toll free: +1.800.842.6410

CardioVascular LifeLine Customer Support
Tel: +1.763.526.7890
Toll free: +1.877.526.7890

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.

medtronic.com/endovenous

DC00030652 © 2015 Medtronic. All rights reserved. Medtronic, Medtronic logo and Further, Together are trademarks of Medtronic. All other brands are trademarks of a Medtronic company.