

# Medtronic

ClosureFast™  
Radiofrequency Ablation System

# Technology you know and trust



The only RFA procedure with published long-term clinical data and a 91.9% closure rate at five years.<sup>1</sup>

## Proven procedure

**91.9%**  
closure rate<sup>1</sup>

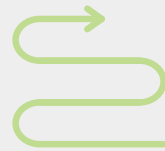
**2.5 M+**  
patients treated<sup>2</sup>

**200+**  
published articles  
and clinical studies<sup>3</sup>

## Lower profile 6F, designed for:<sup>†‡</sup>



Enhanced flexibility



Improved navigation



Increased kink-resistance

Above data is from ClosureFast 7F catheter. ClosureFast 6F is designed to provide the same outcomes as established by ClosureFast 7F catheter.

Adverse events may include hematoma, phlebitis, skin injury, nerve injury, thrombophlebitis, thrombosis, and/or pulmonary embolism.

<sup>†</sup>Compared to ClosureFast 7F catheter and Venclose™\* catheter in bench testing.

<sup>‡</sup>Bench test data on file at Medtronic. N = 15 catheters each. Bench tests may not be indicative of clinical performance.



# Gap-free thermal ablation

The ClosureFast RFA procedure delivers uniform heat for lasting vein closure.<sup>1</sup>

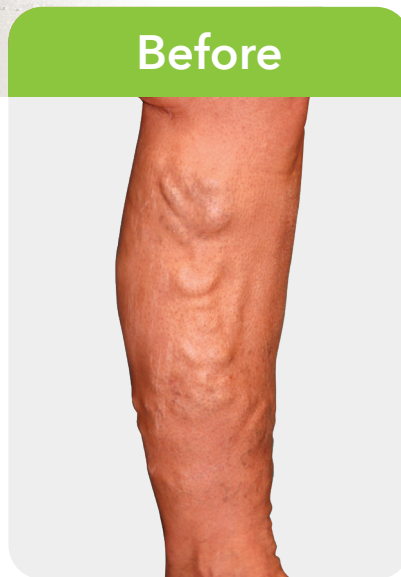
- Patented segmental procedure with 0.5 cm overlap<sup>4</sup>
- Tumescent anesthesia
- Less pain and bruising than laser energy treatment<sup>5</sup>
- Short, comfortable procedure means a quick return to everyday activities<sup>5</sup>
- Post-procedure compression stockings required

These pictures show before and after results of the ClosureFast procedure with no adjunctive treatments.

Adverse events may include hematoma, phlebitis, skin injury, nerve injury, thrombophlebitis, thrombosis, and/or pulmonary embolism.

<sup>†</sup>Individual results may vary. Treated with ClosureFast 7F catheter.

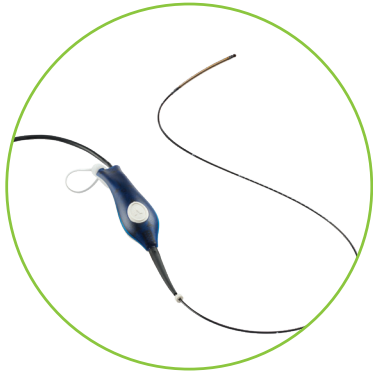
Photos courtesy of Vein Institute of the North Shore, Beverly, MA.



## ClosureFast Catheter

Catheter model	CF6-8-60	CF6-8-100	CF7-7-60	CF7-7-100	CF7-3-60
Introducer sheath (min. ID size)	6F (2.0 mm)	6F (2.0 mm)	7F (2.3 mm)	7F (2.3 mm)	7F (2.3 mm)
Insertable length	60 cm	100 cm	60 cm	100 cm	60 cm
Heating element diameter	2.0 mm	2.0 mm	2.3 mm	2.3 mm	2.3 mm
Heating element length	8 cm	8 cm	7 cm	7 cm	3 cm
Max. power setting	40 W	40 W	40 W	40 W	18 W
Default target temp. setting	120 °C	120° C	120° C	120° C	120° C
Software version: RFG2	4.0.0 or higher	4.0.0 or higher	4.0.0 or higher	4.0.0 or higher	4.4.0 or higher
Software version: RFG3	1.11.0 or higher	1.11.0 or higher	1.11.0 or higher	1.11.0 or higher	1.11.0 or higher
Compatible guidewire	0.025 in	0.025 in	0.025 in	0.025 in	0.025 in

# Procedure components



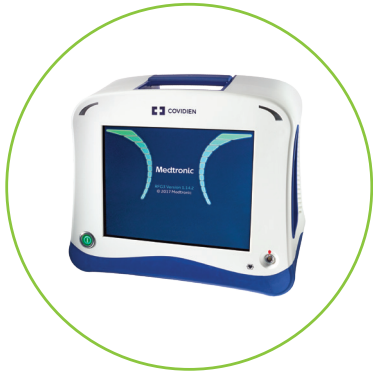
## Catheter

- Precisely heats an 8 cm vein segment (or 3 cm for shorter, refluxing vein lengths) in one 20-second interval.
- Heat from the catheter shrinks and collapses the target vein, creating a fibrotic seal and occluding the vessel.



## Stylet

- Treats incompetent perforator and tributary veins.
- Leaves minimal scarring at the puncture site and can be either primary or adjunct treatment.



## Generator

- Delivers radiofrequency energy to the ClosureFast™ catheter and the ClosureRFS™ stylet to effectively treat CVI.
- The controlled feedback mechanism monitors intravascular heat parameters in real time to automatically regulate therapeutic power.

### ClosureRFS Stylet

Model	RFS2-6-12
Size	6F
Shaft type	Rigid
Working length	12 cm
Compatible guidewire	0.035 in
Max. electrode diameter	6F (2.0 mm)
Max. IV catheter	12-gauge

### ClosureRFG™ Generator

Model	RFG3
Voltage	Universal (100-240 V)
Height	26.7 cm (10.5 in)
Width	34 cm (13.4 in)
Depth	17.3 cm (6.8 in)
Weight	6.8 kg (15 lbs.) maximum

Please review the Instructions for Use for accessories and supplies that you will need to purchase for the ClosureFast RFA system procedure.

## References

- <sup>1</sup> Proebstle TM, Alm BJ, Göckeritz O, et al. Five-year results from the prospective European multicentre cohort study on radiofrequency segmental thermal ablation for incompetent great saphenous veins. *Br J Surg*. February 2015;102(3):212-218.
- <sup>2</sup> ClosureFast Procedures. Medtronic data on file, 2022.
- <sup>3</sup> Medtronic ClosureFast Procedure Publications. Medtronic data on file, 2022.
- <sup>4</sup> ClosureFast and ClosureFast RFS Patents. Medtronic data on file, 2022.
- <sup>5</sup> Almeida JI, Kaufman J, Göckeritz O, et al. Radiofrequency endovenous ClosureFAST versus laser ablation for the treatment of great saphenous reflux: A multicenter, single-blinded, randomized study (RECOVERY Study). *J Vasc Interv Radiol*. June 2009;20(6):752-759.

### **ClosureFast Endovenous Radiofrequency (RFA) Ablation Catheter Reference Statement:**

**IMPORTANT:** Please reference the Instructions for Use (IFU) for a complete listing of indications, contraindications, warnings and precautions, adverse effects, and suggested procedures.

### **ClosureRFG Radiofrequency Generator Reference Statement:**

**IMPORTANT:** Please reference the Operation Manual for a complete listing of indications, warnings, precautions, safety notices, and operational information.

### **ClosureRFS Endovenous Radiofrequency Stylet Reference Statement:**

**IMPORTANT:** Please reference the Instructions for Use (IFU) for a complete listing of indications, contraindications, warnings and precautions, adverse effects, and suggested procedures.

**CAUTION:** Federal (USA) law restricts these devices to sale by or on the order of a physician.



# Medtronic

Learn more at [Medtronic.com/ClosureFast6F](https://www.Medtronic.com/ClosureFast6F)