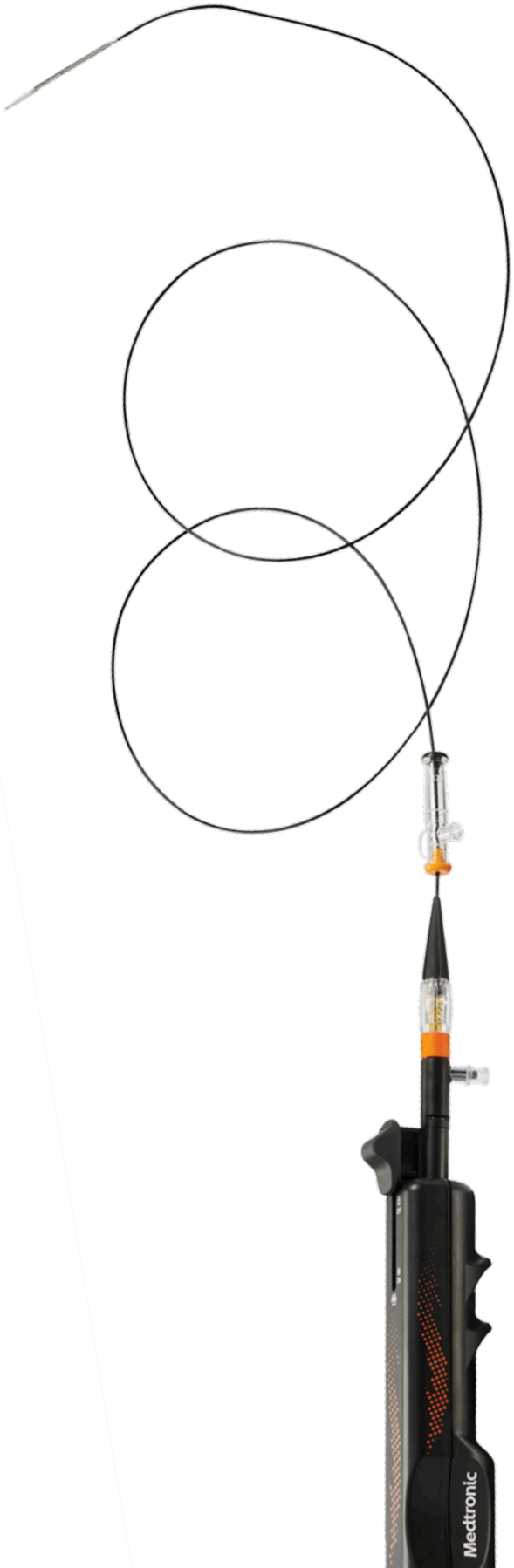
Medtronic
Engineering the extraordinary



TurboHawk™ Plus
directional atherectomy system

Simplicity plus performance

Gain advantage over plaque in your practice

Operate with ease

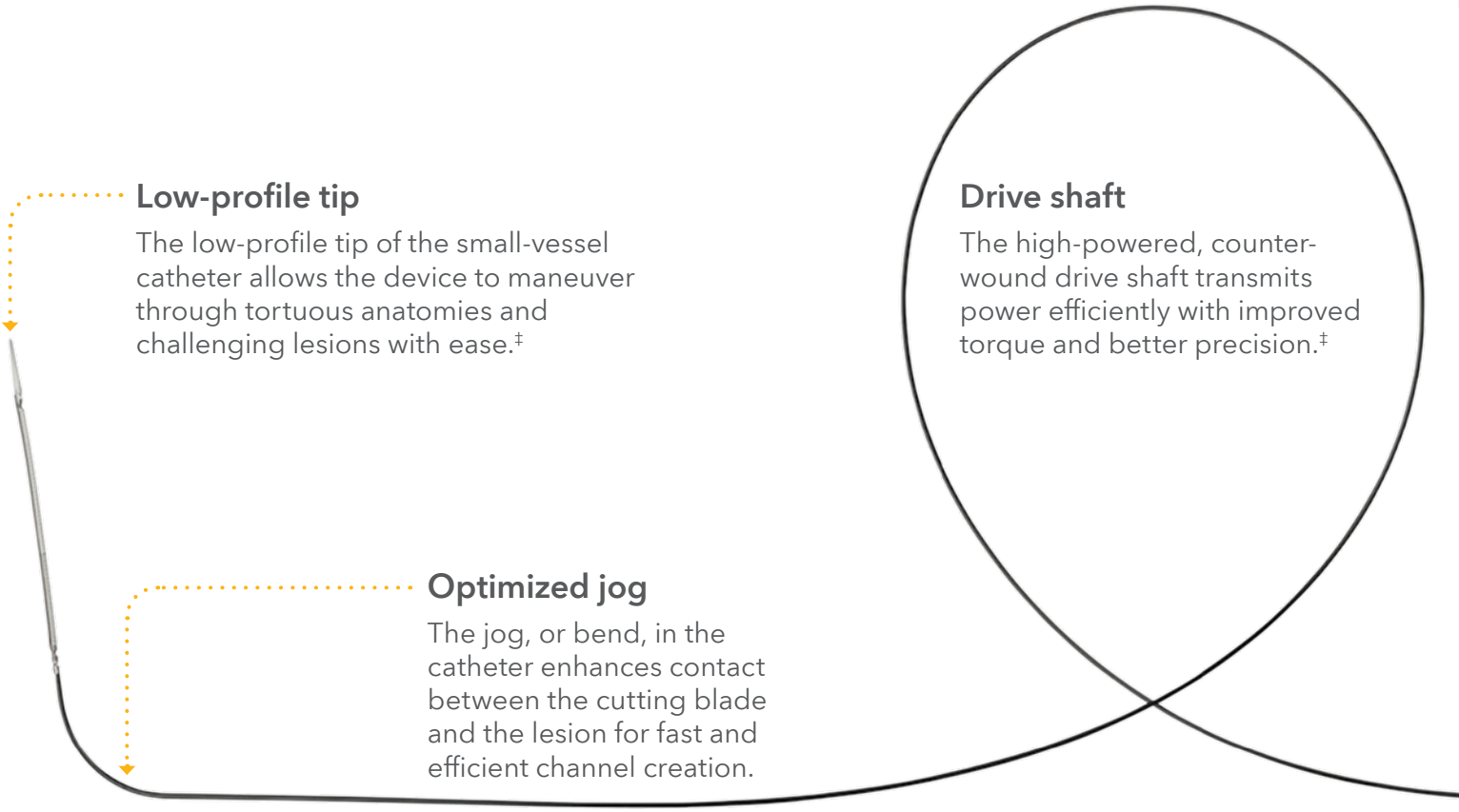
The TurboHawk™ Plus device is designed to be simple to use with easy setup and no capital equipment required.

Treat PAD effectively and efficiently

Offering you the versatility to create a channel or maximize lumen gain and remove eccentric or concentric disease.[1,2]

Keep future treatment options open

Remove soft to moderately calcified plaque while preserving a patient's native vessel.



Low-profile tip

The low-profile tip of the small-vessel catheter allows the device to maneuver through tortuous anatomies and challenging lesions with ease.‡

Drive shaft

The high-powered, counter-wound drive shaft transmits power efficiently with improved torque and better precision.‡

Optimized jog

The jog, or bend, in the catheter enhances contact between the cutting blade and the lesion for fast and efficient channel creation.

The optimized jog improves engagement and enhances wall opposition for vessel sizes 2–7 mm, providing greater versatility.‡

Your vision. Our support.

When you partner with Medtronic for your outpatient practice, you gain access to a vast product portfolio, but also support and solutions to help tackle your pain points, like navigating reimbursement changes and driving efficiencies.

Distal flush tool

The preloaded distal flush tool allows for fast, easy cleaning.†

Torquer knob

Regardless of concentric or eccentric disease, the torquer knob enables targeting of the lesion during treatment.†

Risks may include but are not limited to: arterial perforation, embolism or arterial thrombosis, arterial dissection, arterial spasm, and vascular complications that could require surgical repair.

Target and remove plaque with confidence

TurboHawk™ Plus directional atherectomy system

With versatility to treat a variety of plaque morphologies including soft to moderately calcified plaque, the TurboHawk™ Plus system removes plaque while preserving a patient's native vessel.

Model specifications

	Model	Vessel diameter (mm)	Crossing profile (mm)	Working length§ (cm)	Effective length◊ (cm)	Tip length (cm)	Max. cut length (mm)	Packing device
7F	THP-LS	3.5–7.0	2.6	114	107	6.6	50	YES
	THP-LX	3.5–7.0	2.6	114	104	9.6	75	YES
6F	THP-M	3.0–7.0	2.2	135	129	5.9	40	YES
	THP-S	2.0–4.0	2.2	151	145	5.9	40	YES

Note: Maximum guidewire is 0.014" for all directional atherectomy and plaque excision systems.

† As compared to TurboHawk™ directional atherectomy system.
‡ Bench data on file (6F: 10542060DOC & 7FR: RE-PV13727), competitive claims compared to TurboHawk™ directional atherectomy system.
§ Working length: distal end of preloaded flush tool, in the proximal position, to the distal end of tip.
◊ Effective length: distal end of preloaded flush tool, in the proximal position, to the proximal end of cutter window.
1. McKinsey J, Zellar T, Rocha-Singh KJ, Jaff MR, Garcia LA, DEFINITIVE LE Investigators. Lower extremity revascularization using directional atherectomy: 12-month prospective results of the DEFINITIVE LE study. *JACC Cardiovasc Interv.* August 2014;7(8):923-933.
2. Zeller T, Langhoff R, Rocha-Singh KJ, et al. Directional atherectomy followed by a paclitaxel-coated balloon to inhibit restenosis and maintain vessel patency twelve-month results of the DEFINITIVE AR study. *Circ Cardiovasc Interv.* September 2017;10(9):e004848.

Important Information: Indications, contraindications, warnings, and instructions for use can be found in the product labeling supplied with each device.

Indications for Use: The TurboHawk™ Plus Directional Atherectomy System is intended for use in atherectomy of the peripheral vasculature. The TurboHawk Plus catheter is indicated for use in conjunction with the SpiderFX™ Embolic Protection Device in the treatment of severely calcified lesions.

The TurboHawk™ Plus catheter is not intended for use in the coronary, carotid, iliac, or renal vasculature. Medtronic directional atherectomy products are contraindicated for use in patients with in-stent restenosis.

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

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