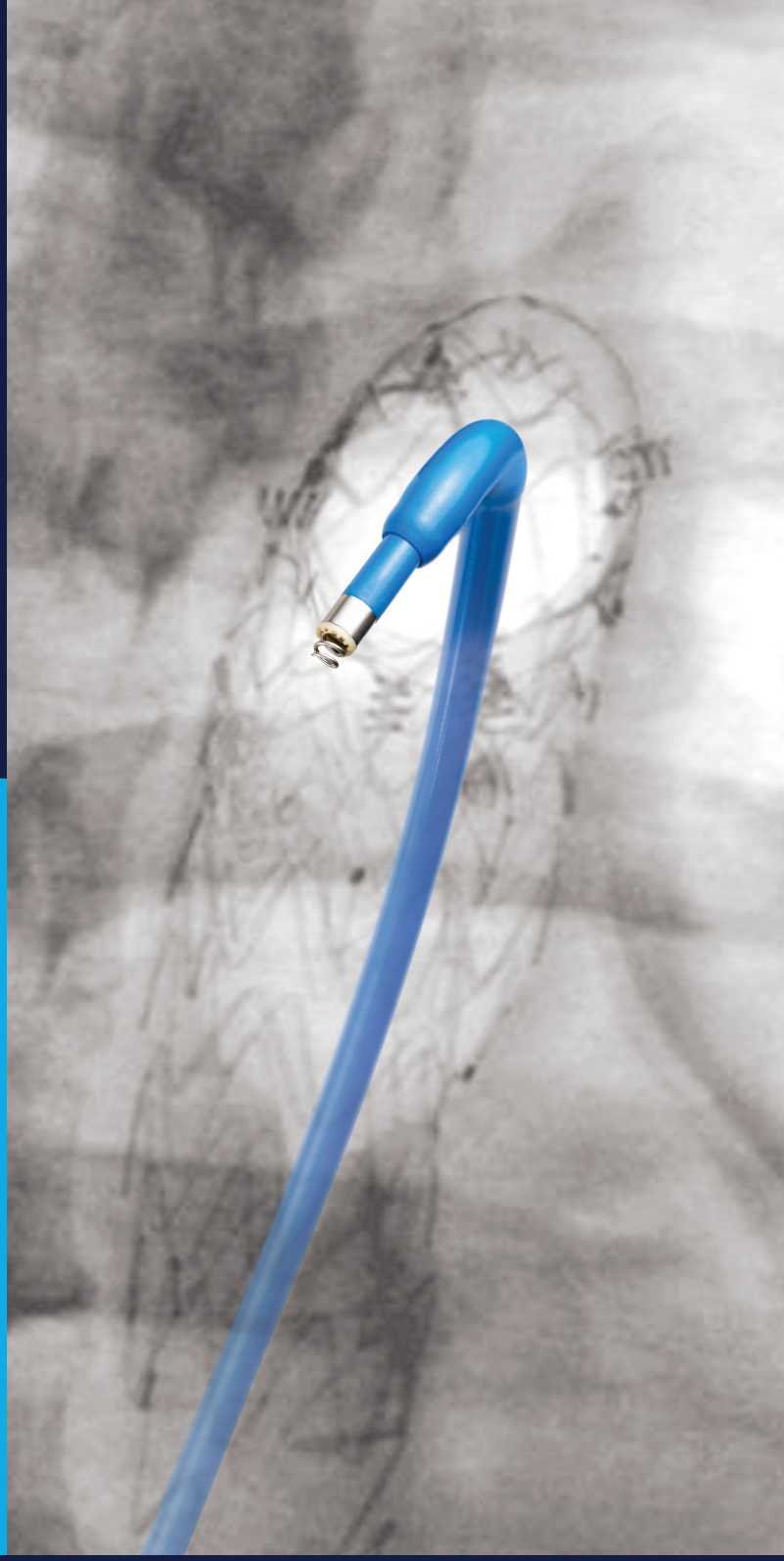
ENHANCE OUTCOMES AND DURABILITY



Aptus™ Heli-FX™
EndoAnchor™ System

Medtronic

TAILOR SEAL AND FIXATION IN PRIMARY AND REVISION EVAR AND TEVAR CASES

Helical shaped EndoAnchor™ implants lock the endograft to the aorta and provide the ability to customize placement and address patient-specific needs.

Confidently and rapidly target and seal Type I endoleaks

- Intraoperative endoleaks that occur upon endograft placement
- Late endoleaks that require treatment in a revision setting

16 min. (avg) **ADDITIONAL CASE TIME FOR ENDOANCHOR™ FIXATION[1]**

Enhance durability to the level of a surgical anastomosis and address concerns for future complications

- In complex aortic necks:
  - Type I endoleaks are 4.5 times more likely to occur one year after EVAR in patients with complex aortic necks[2]
  - Aneurysm-related mortality is 9 times greater in patients with complex aortic neck anatomies[2]
  - When more than one hostile neck anatomical variable (short, conical, wide, and/or high angulation) is present, there is additional significant risk of mortality, major adverse events, intraoperative endoleaks, and adjunctive procedures[3]
- In long term repair regardless of anatomy:
  - Over time, the chance of complications increases for EVAR, overall[4]

ENDOANCHOR™ IMPLANT[5]

Helical shape
- 3.0 mm diameter × 4.5 mm length
- MP35N-LT material: demonstrated durability, excellent radiopacity

Conical tip
- Atraumatic and nondamaging to compatible stent grafts

Crossbar
- Prevents over penetration

APPLIER

Two-stage EndoAnchor™ deployment
- Allows placement confirmation and repositioning

Motorized controls, light panel
- Ease of deployment, guides user through each step

GUIDE

Deflectable tip
- Allows the user to position the EndoAnchor™ implant precisely to intended location in diverse and complex anatomies

16 F / 18 F profile
- Compatible with current EVAR and TEVAR procedures

Guide markers
- Ease orienting and positioning of Guide

Multiple deflection lengths
- Accommodate large range of aortic neck diameters

1 Based on average total duration for EndoAnchor™ fixation in "prophylatic EndoAnchor™ implantation" per ANCHOR August 2015 data cut, data on file.
2 Antoniou GA, Georgiadis GS, Antoniou SA, et al. A Meta-analysis of Outcomes of Endovascular Abdominal Aortic Aneurysm Repair in Patients with Hostile and Friendly Neck Anatomy. J Vasc Surg. 2013;57:527-538.
3 Speziale F et al. Ann Vasc Surg. 2014 Nov;28(8):1892-900.
4 Greenhalgh RM et al. N Engl J Med. 2010 May 20;362(20):1863-71 De Bruin JL et al. N Engl J Med 2010;362:1881-9 Becquemin JP et al. J Vasc Surg. 2011 May;53(5):1167-1173
5 Bench Test Data on file at Medtronic. Data not indicative of clinical performance.

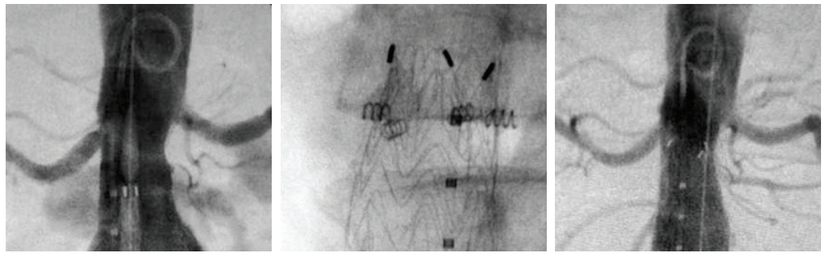
ENDOANCHOR™ FIXATION CASE REVIEWS

Primary AAA[1]

Used Prophylactically in Multi-Variate Complex Infra-Renal Neck Anatomy

80 year old male with 5.6cm AAA

Proximal neck with reverse taper and angulation



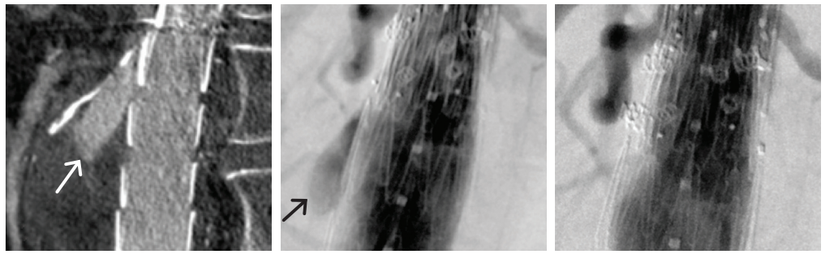
- Complex neck is concern for future complications
- 4 EndoAnchor™ implants deployed to augment seal stability
- Final angio demonstrates no endoleaks

Revision AAA[2]

Used to Treat a Delayed Type Ia Endoleak

72 year old female with 5.5cm AAA

Final angio of primary EVAR demonstrated no endoleaks.



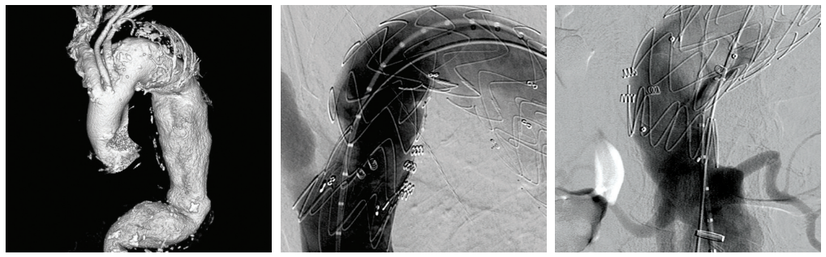
- At 1-year post implant Type Ia endoleak is observed
- Aortic cuff implanted, endoleak persists despite balloon dilation
- Initial 4 EndoAnchor™ implants deployed circumferentially
- 2 additional EndoAnchor™ implants deployed targeting endoleak
- Final angio demonstrates successful resolution of endoleak

Primary TAA[3]

Used Prophylactically in Complex Proximal and Distal Neck Anatomies

Patient with 7.5cm TAA

Short proximal and distal necks

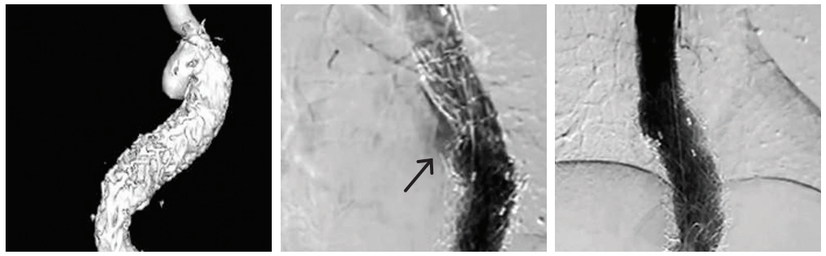


- Short proximal and distal necks are concern for future complications
- 5 EndoAnchor™ implants deployed proximally
- Final angio demonstrates well-opposed endograft with no Type Ia endoleaks
- 4 EndoAnchor™ implants deployed distally
- Final angio demonstrates well-opposed endograft with no Type Ib endoleaks

Revision TAA[4]

Used to Treat a Late Type Ia Endoleak

At 5-year follow-up, loss of proximal seal observed due to disease progression and neck dilatation



- Type Ia endoleak identified with neck dilatation
- 2 components implanted
- Type Ia endoleak persists
- 4 EndoAnchor™ implants deployed proximally
- Final angio demonstrates successful resolution of endoleak

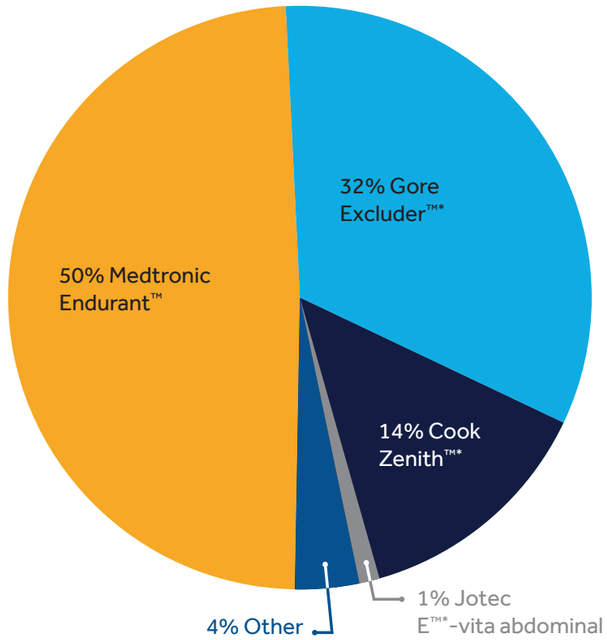
1 Case images courtesy of Jeff Indes, MD and John Aruny, MD, Yale New Haven Hospital
2 Case images courtesy of Eric Verhoeven, MD, PhD, Nuremberg, Germany
3 Case images courtesy of Jean Panneton, MD, Eastern Virginia Medical School, Virginia
4 Case images courtesy of Colin Bicknell, MD and Mohamad Hamady, MD, Imperial College, London, UK

ADVANCE TREATMENT OF TYPE 1 ENDOLEAKS AND SIMPLIFY REPAIR OF COMPLEX ANATOMY

ESTABLISHED IN EVAR

- To date, more than 10,000 patients have been treated worldwide[1]
- Of these patients, 7 in 10 have been treated in a primary EVAR setting[1]
- EndoAnchor™ implant utilization from international, real world experiences in the ANCHOR registry shows:
  - In the primary setting, 85% were treated prophylatically to address concerns for future complications and 15% were treated for intraoperative Type I endoleaks or endograft distal misdeployment.[1]
  - Within one year of the index procedure in the primary setting, the rate of Type Ia endoleaks occurring was 4.2%.
  - Hostile aortic necks identified in the majority of patients (78% and 75%, respectively for prophylactic subjects in the primary arm and therapeutic subjects in the primary and revision arms[3]

ENDOGRAFTS USED, BY BRAND



EVAR ORDERING INFORMATION

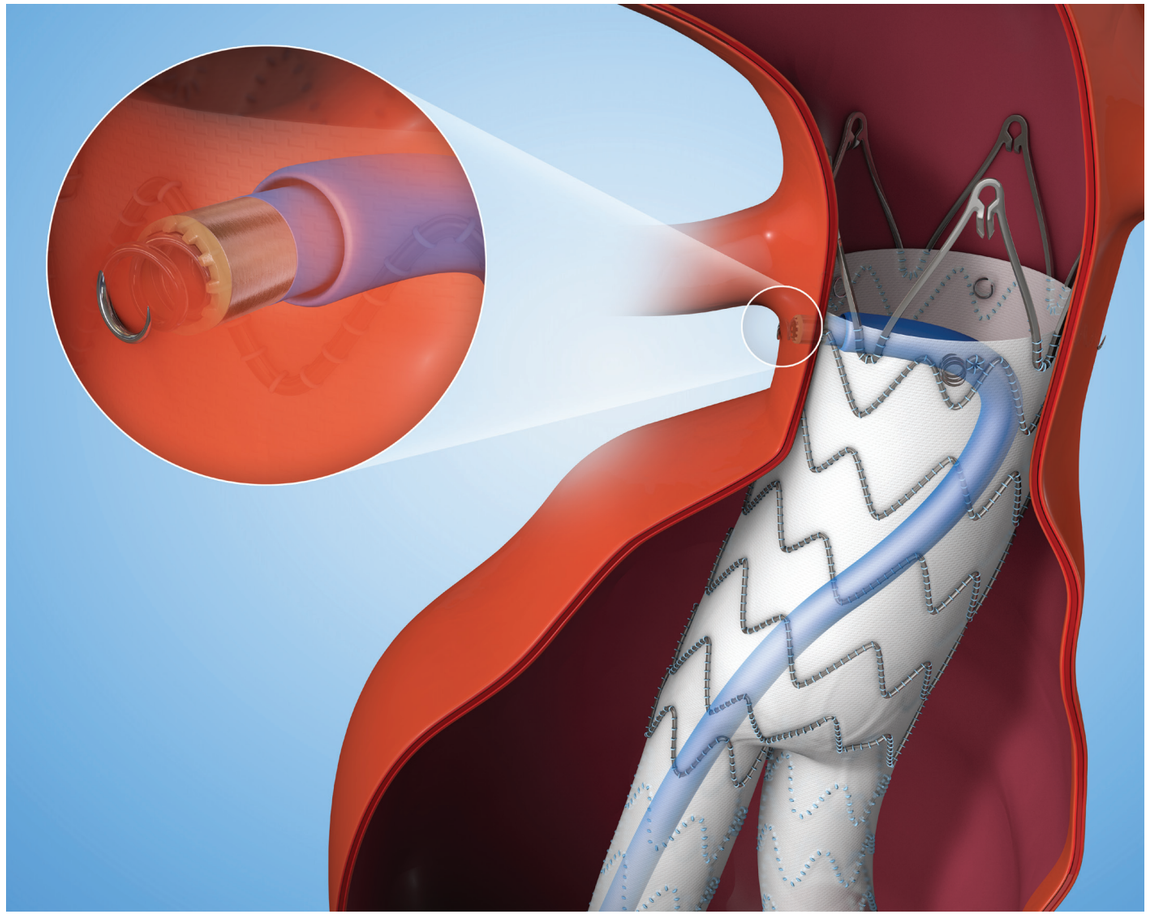
AAA Components (mm)	Deflected Tip Reach (mm)	Recommended Neck Diameter (mm)	Working Length (cm)	OD (F)	Catalog Number
Heli-FX™ Guide, 22	22	18-28	62	16	SG-64
Heli-FX™ Guide, 28	28	28-32	62	16	HG-16-62-28
Heli-FX™ Applier and EndoAnchor™ Cassette (w/10 EndoAnchor™ Implants)	NA	NA	86	12	SA-85

TEVAR ORDERING INFORMATION

TAA Components (mm)	Deflected Tip Reach (mm)	Recommended Neck Diameter (mm)	Working Length (cm)	OD (F)	Catalog Number
Heli-FX™ Guide, 22	22	18-28	90	18	HG-18-90-22
Heli-FX™ Guide, 32	32	28-38	90	18	HG-18-90-32
Heli-FX™ Guide, 42	42	38-42	90	18	HG-18-90-42
Heli-FX™ Applier and EndoAnchor™ Cassette (w/10 EndoAnchor™ Implants)	NA	NA	114cm	12	HA-18-114

™* Third party brands are trademarks of their respective owners.

1 Jordan, W. et al. vascular. 2016. 1Y results from Anchor trial of endoanchors Prevention of neck complications after EVAR.
2 Jordan WD, Mehta M, Varnagy D, et al. Results of the ANCHOR Prospective, Multicenter Registry of EndoAnchors for Type Ia Endoleaks and Endograft Migration in Patients with Challenging Anatomy. J Vasc Surg. 2014;60:885-892.
3 Presentation by Jordan WD. Managing Complex EVAR Cases: Results from the ANCHOR Registry, VIVA 2014



WHEN CAN ENDOANCHOR™ IMPLANT BENEFIT YOUR PATIENTS?

SELECT SUBSET OF ENDOVASCULAR PATIENTS

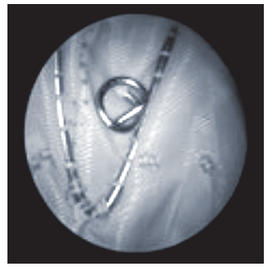
Secondary	Primary	Primary
EXISTING SEAL COMPLICATIONS	**HIGHLY CHALLENGING ANATOMIES**	**MITIGATING RISK FACTORS**
• Acute & late Type I endoleaks[1] • Type I endoleaks in urgent or ruptured EVAR • Augmenting stability in migrated grafts[2]	• Irregularly shaped necks (short, wide, highly angulated, conical)[1] • Difficult landing zones[2]	• Severe comorbidities • Patients potentially lost during F/U[3] • Long remaining life expectancy[3]

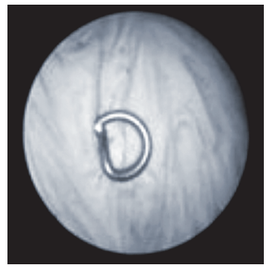
1 de Vries. *JEVT.* 2013;20(4):481-3
2 Jordan et al. J Vasc Surg. 2015:61(6):1383-90
3 Schanzer et al. Circulation 2011;123:2848-2855.

SECURE YOUR PATIENT'S FUTURE

MINIMIZE RISK WITH PROVEN SAFETY

- Confirmed compatibility with Medtronic, Cook, Gore and Jotec endografts[1]
- In more than 10,000 cases and an estimated over 50,000 EndoAnchor™ implants placed to date, no evidence of graft damage or late EndoAnchor™ dislocation or fracture[1]
- Maximize the seal without expanding seal area, potentially avoiding risks associated with more complex procedures





No damage to graft or EndoAnchor™ post 400M cycles fatigue testing

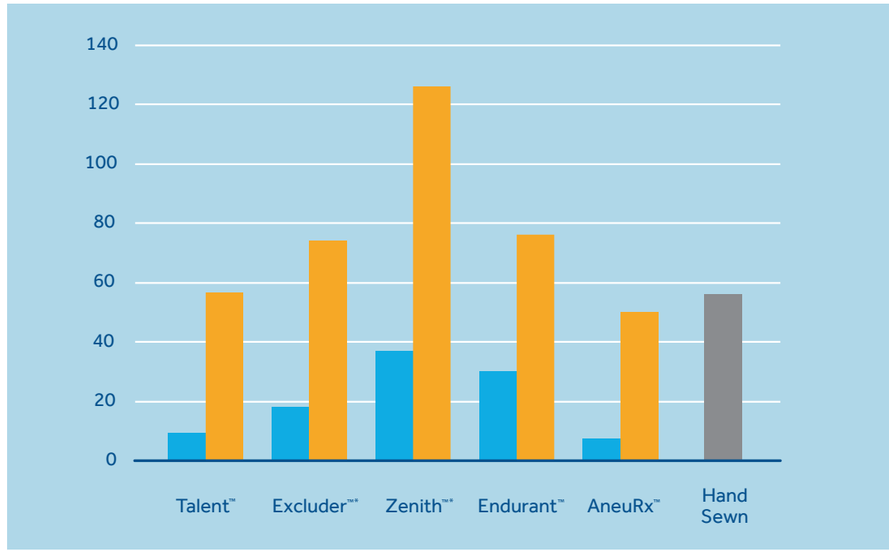
ENABLE SIMPLE AND EFFECTIVE TREATMENT IN MORE COMPLEX CASES

- Strong follow-up results after prophylactic use in complex EVAR:
  - No ruptures, endograft migrations or open surgical conversions over mean 14 month follow-up (range 0-29 months)[3]
  - High freedom from Type Ia endoleaks (98.5%) and AAA expansion (98.4%) in post-operative CT follow-up[3]
  - EVAR with EndoAnchor™ system had substantially lower Type I endoleak rates as compared to EVAR alone (1.6% vs 9.8-11%)[4]
- Effective in treating Type I endoleaks and maintaining seal:
  - High success in sealing intra-operative (83%) and late Type I endoleaks (80%), at final angiography[5]
  - High success in preventing further complications after treatment of:
    - Intra-operative Type Ia endoleaks (97% freedom from proximal seal complications at 15 month mean follow-up)[6]
    - Late Type Ia endoleaks (91% freedom from proximal seal complications at 17 month mean follow-up)[6]
    - Late Type I endoleaks with endograft migration (95% freedom from proximal seal complications at 16 month mean follow-up)[6]

DELIVER RAPID BAILOUT FOR TYPE I ENDOLEAK

- In patients with ruptured aneurysms or at high risk for rupture, confidently and quickly target and seal Type I endoleaks:
  - Implant with minimal time: reported average EndoAnchor™ implantation time in urgent and emergency EVAR is 15 minutes[7]

DISPLACEMENT FORCE IN NEWTONS[1]



ENHANCE DURABILITY TO THE LEVEL OF A SURGICAL ANASTOMOSIS AND ADDRESS CONCERNS FOR FUTURE COMPLICATIONS[2]

1 Data on file at Medtronic as of July 2016
2 Per Instructions for Use, the EndoAnchor™ implant should be used with caution in Talent and Valiant endografts
3 Jordan WD, deVries JP, Ouriel K, et al. Midterm Outcome of EndoAnchors for the Prevention of Endoleak and Stent-Graft Migration in Patients with Challenging Proximal Aortic Neck Anatomy. J Endovasc Ther. 2015;Vol. 22(2):163-170.
4 Podium presentation by Jordan WD: Benefit of EndoAnchors in Endovascular Aneurysm Repair. 2014 Vascular Annual Meeting for SVS.
5 Jordan WD, Mehta M, Varnagy D, et al. Results of the ANCHOR Prospective, Multicenter Registry of EndoAnchors for Type 1a Endoleaks and Endograft Migration in Patients with Challenging Anatomy. J Vasc Surg. 2014;60:885-892.
6 Mean follow-up period: 16 months. deVries JP, Ouriel K, Mehta M, et al. Analysis of EndoAnchors for Endovascular Aneurysm Repair by Indications for Use. *J Vasc Surg*. 2014;60:1460-1467.
7 Abstract presentation on EndoAnchors in Urgent EVAR by Peter Schneider at the VIVA late-breaking sessions, 2014

* Third party brands are trademarks of their respective owners.
1 Melas N et al, J Vasc Surg 2012;55:1726-33.
2 Presentation on EndoAnchors in Urgent EVAR by Dr. Peter Schneider at VIVA late-breaking clinical trials, 2014.

Medtronic

Invatec S.p.A.
Via Martiri della Libertà 7
25030 Roncadelle (BS)
Italy
Tel: +39.030.2589311

Medtronic
710 Medtronic Parkway NE
Minneapolis, MN 55432
USA
Tel: +1.763.514.4000

Medtronic International Trading Sàrl
Route du Molliau 31
CH-1131 Tolochenaz
Switzerland
Tel: +41.21.802.7000

Medtronic of Canada Ltd.
99 Hereford Street
Brampton, Ontario L6Y 0R3
Canada
Tel: +1.905.460.3800

Medtronic Latin America
3750 NW 87th Avenue, Suite 700
Miami, FL 33178
USA
Tel: +1.786.709.4200

Medtronic International Ltd.
49 Changi South Avenue 2
Singapore 486056
Tel: +65.6436.5000

Medtronic Australasia Pty Ltd.
97 Waterloo Road
North Ryde, NSW 2113
Australia
Tel: +61.29857.9000

Medtronic New Zealand
Unit N16, Mezzanine Level 5
Gloucester Park Road
Onehunga
Auckland
New Zealand

Medtronic Korea Co., Ltd.
5F, Sajo Building
1001 Daechi-dong, Kangnam-ku
Seoul, 135-280
Korea
Tel: +82.2.3404.3600

Medtronic META FZ-LLC
Office Park, Block D, 2nd Floor
PO Box 500638
Dubai Internet City | Dubai,
United Arab Emirates
Tel: +971.4.818.2666

medtronic.com/aortic