

Cook Medical off-the-shelf fenestrated endograft: current indications and limitations

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Conflicts of Interest

- COOK Medical
 - Consulting, proctoring, travels
 - IP

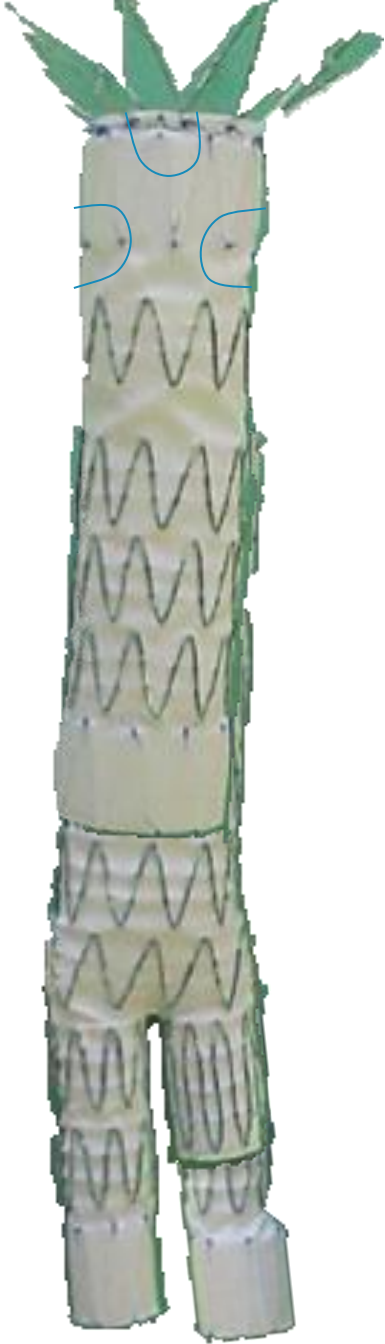
Background

Standard Stentgraft

- Neck > 15 (10)mm
 - Neck parallel
 - Thrombus free
- 15-20% of AAA will have inadequate neck for standard infrarenal SG





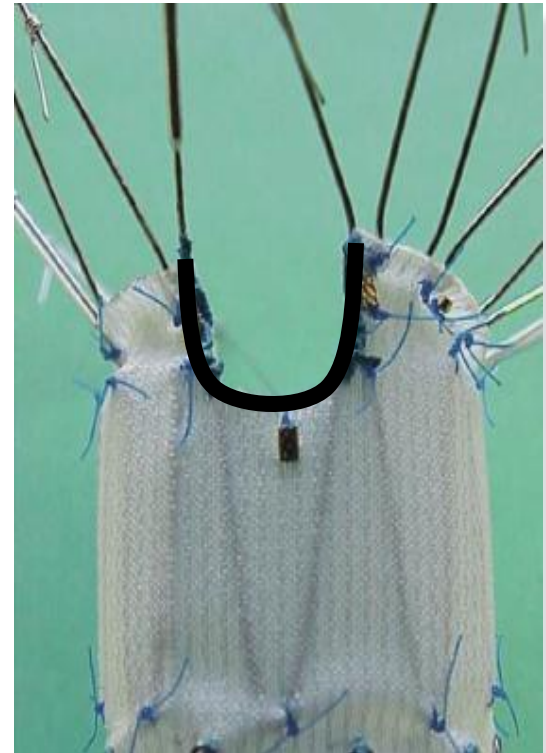
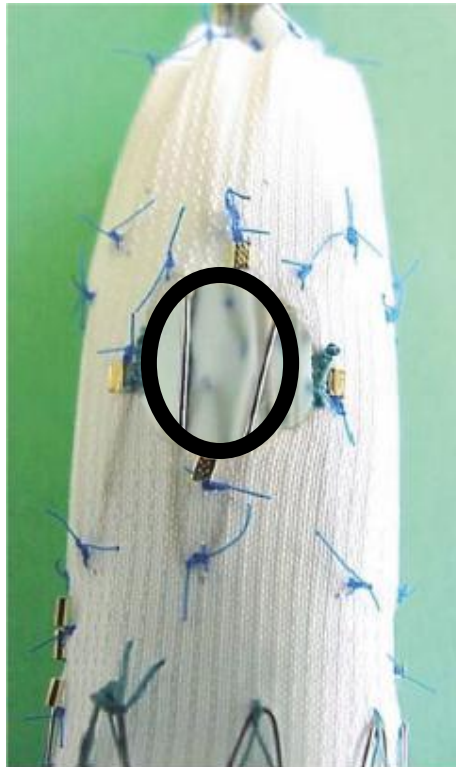
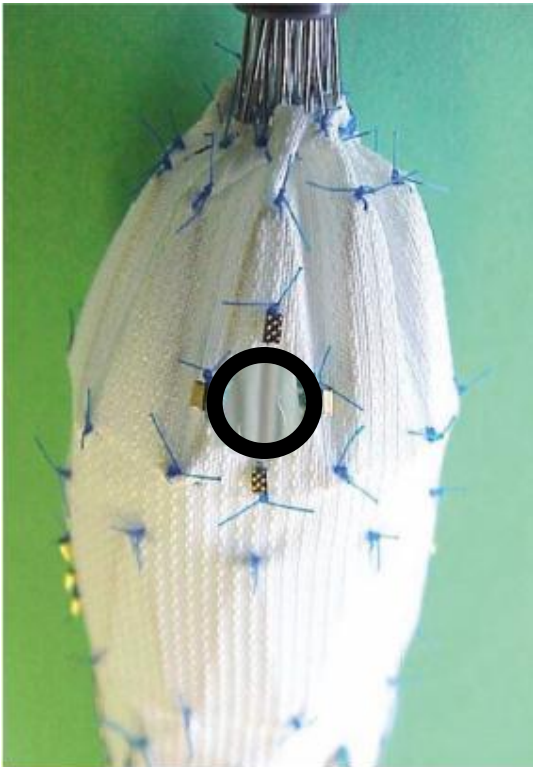


Fenestrated SG

- 3 Piece modular design
 - Proximal, tubular with fenestrations
 - Second, bifurcated w/o top cap
 - Contralateral limb

● Reinforced Fenestrations

- Keeps fenestrations open
- Allows aggressive PTA and flaring
- Gold markers



RESULTS Fenestrated Stentgraft

First Author	n	30d Mortality (%)	Technical success (%)	TVP 1year(%)	Reinterventions (%)
Anderson ¹⁷	13	0	100	97	0
Halak ¹⁸	17	0	91	89	
Muhs ¹⁹	28	2,6	94	92	8
O'Neill ²⁰	119	1	98	94	12
Semmens ²¹	58	3,4	91	91	24
Ziegler ²²	63	0	97	93	21
Scurr ²³	45	2,2	67	97	13
Bicknell ²⁴	15	0	98	97	0
Kristmundsson ²⁵	54	5,5	91	96	9

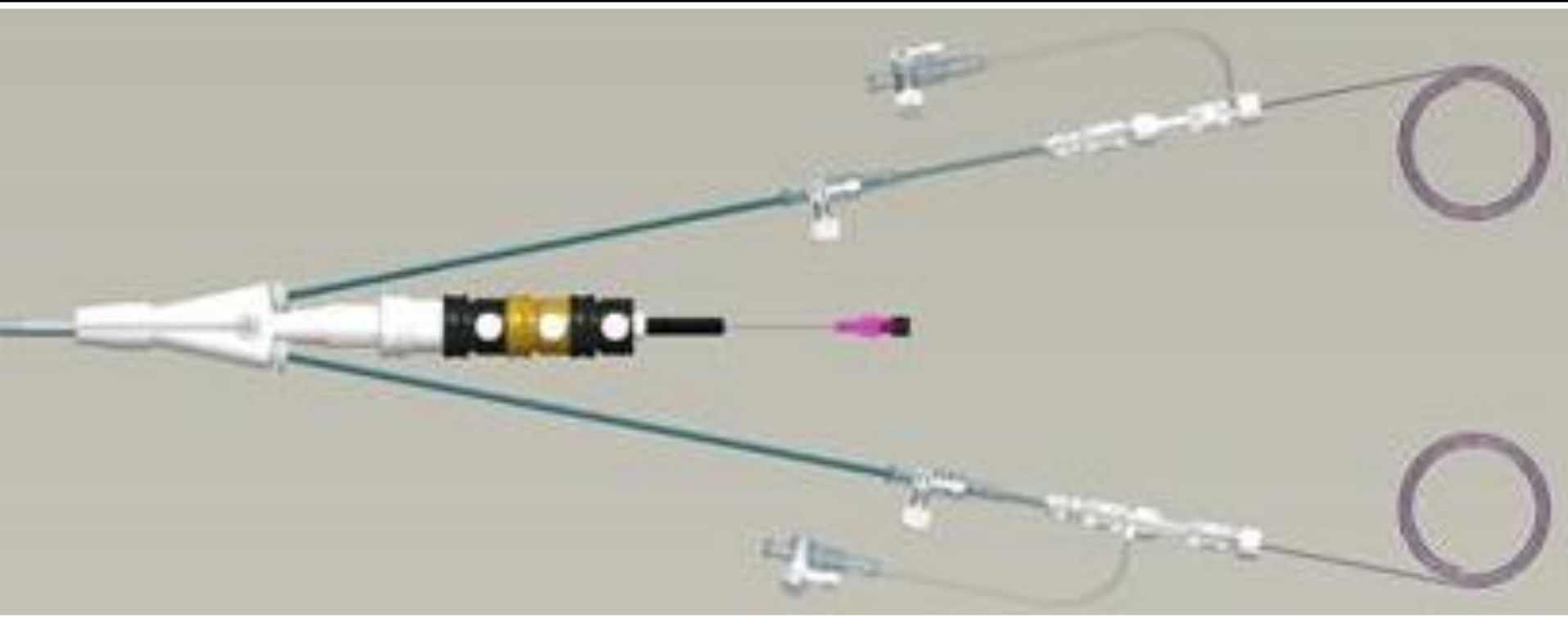
Problems with current technology

- Planning
 - Margin of Error
- Production Delay
 - 6-8weeks
- Bilateral Access
 - LE perfusion
 - Compromised access
- Intraoperative SG manipulation

Preloaded Stentgraft

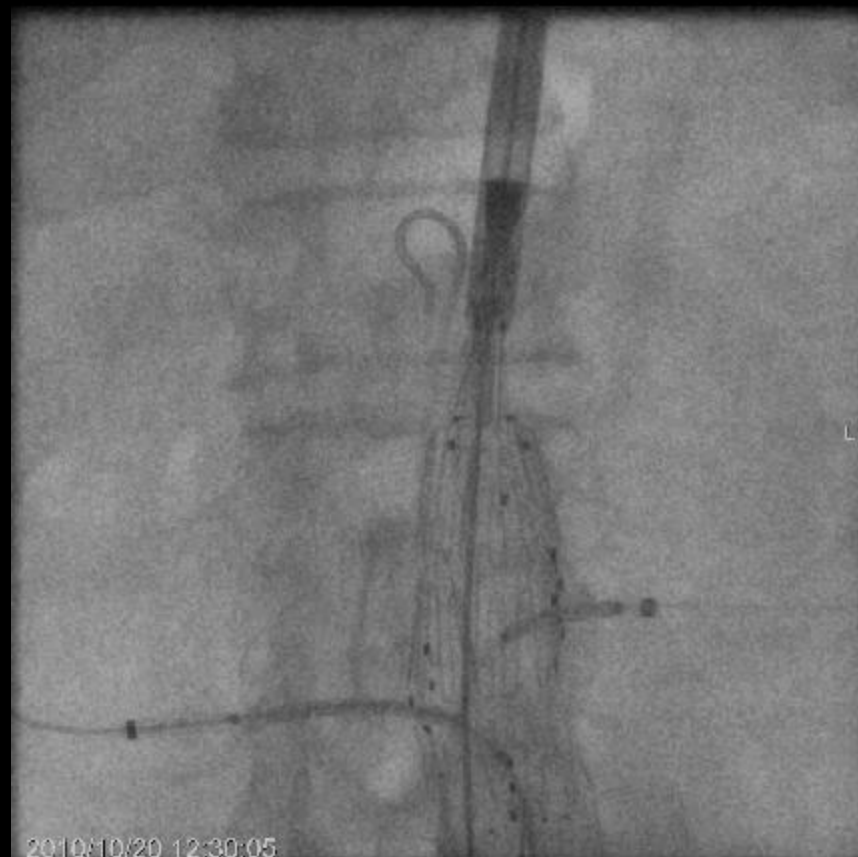
- Unilateral access
- Indwelling Renal Sheaths
- Preloaded wire through renal fenestrations
- Self Retrieving Top Cap

Zenith[®] Preloaded Delivery System



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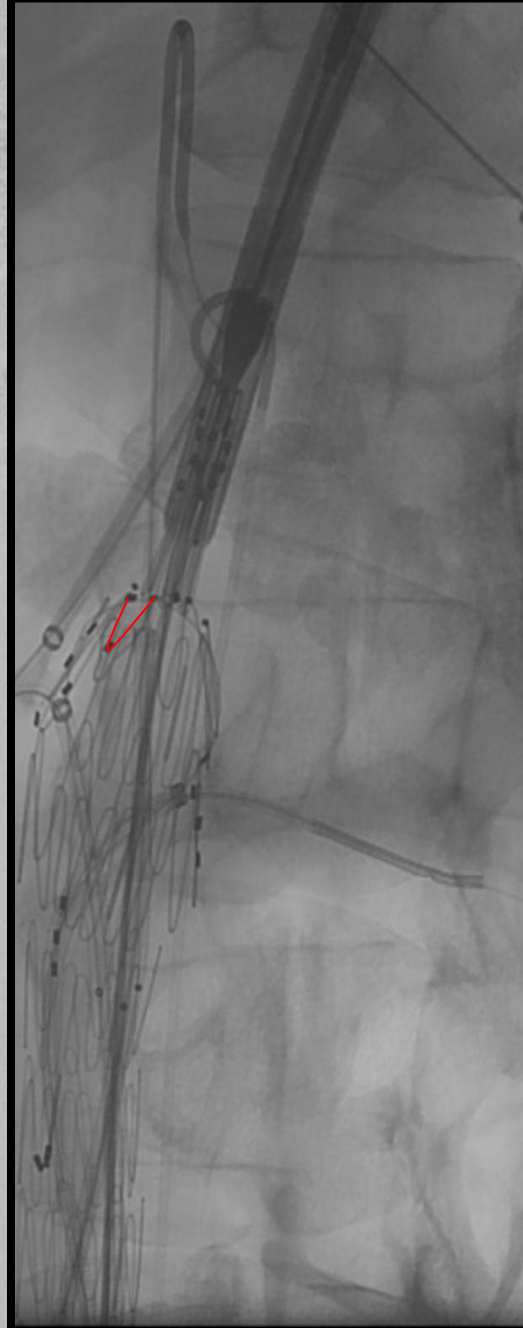
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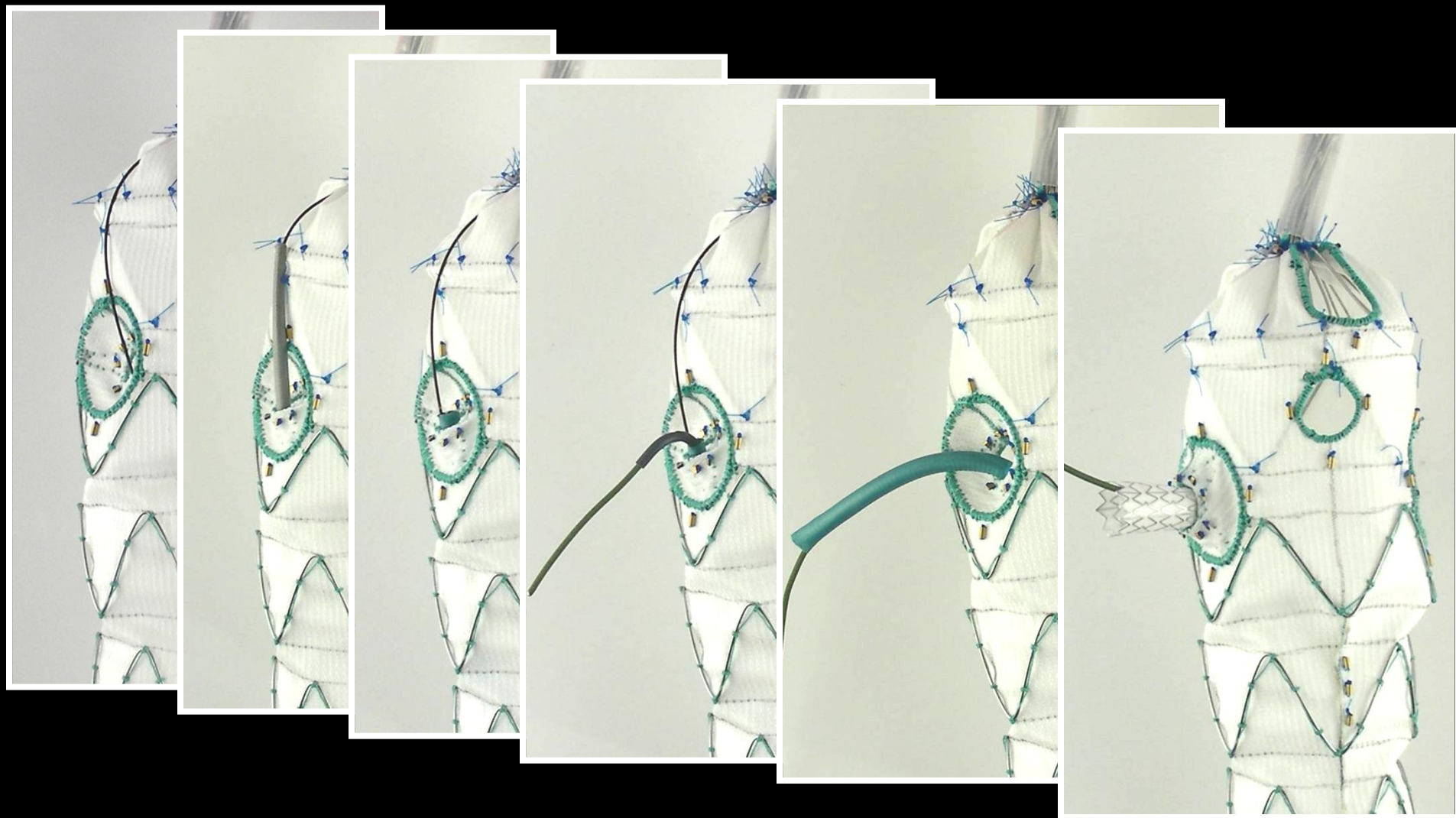
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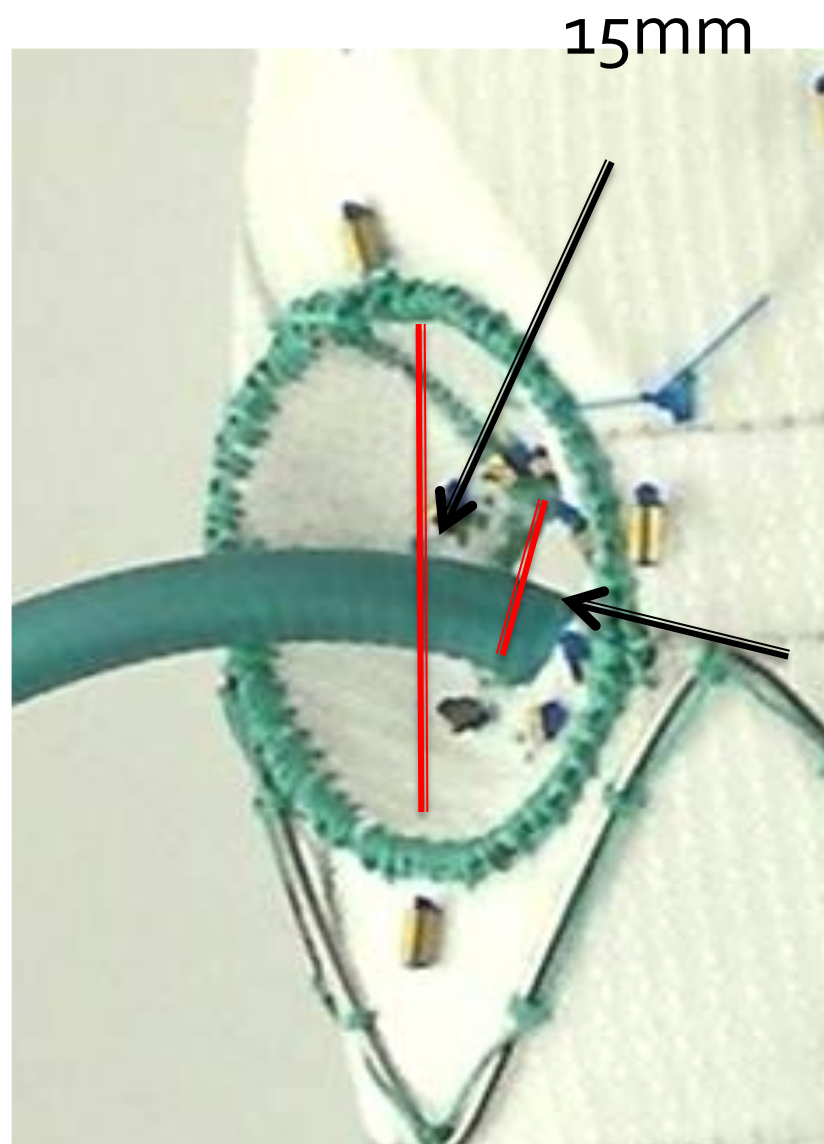
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KONTRAST
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80 kV
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Off the Shelf Design





15mm

6mm



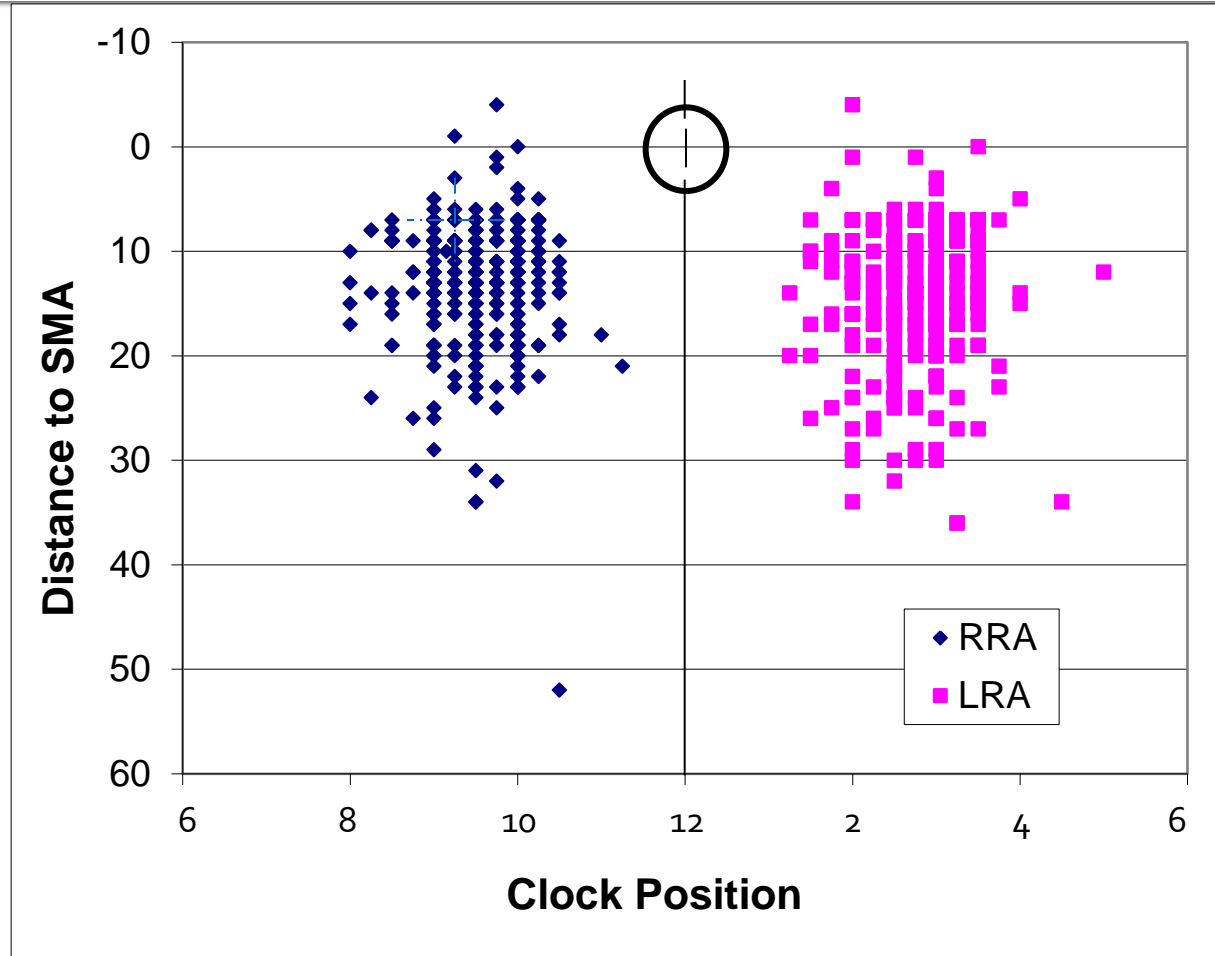
◆ CLINICAL INVESTIGATION

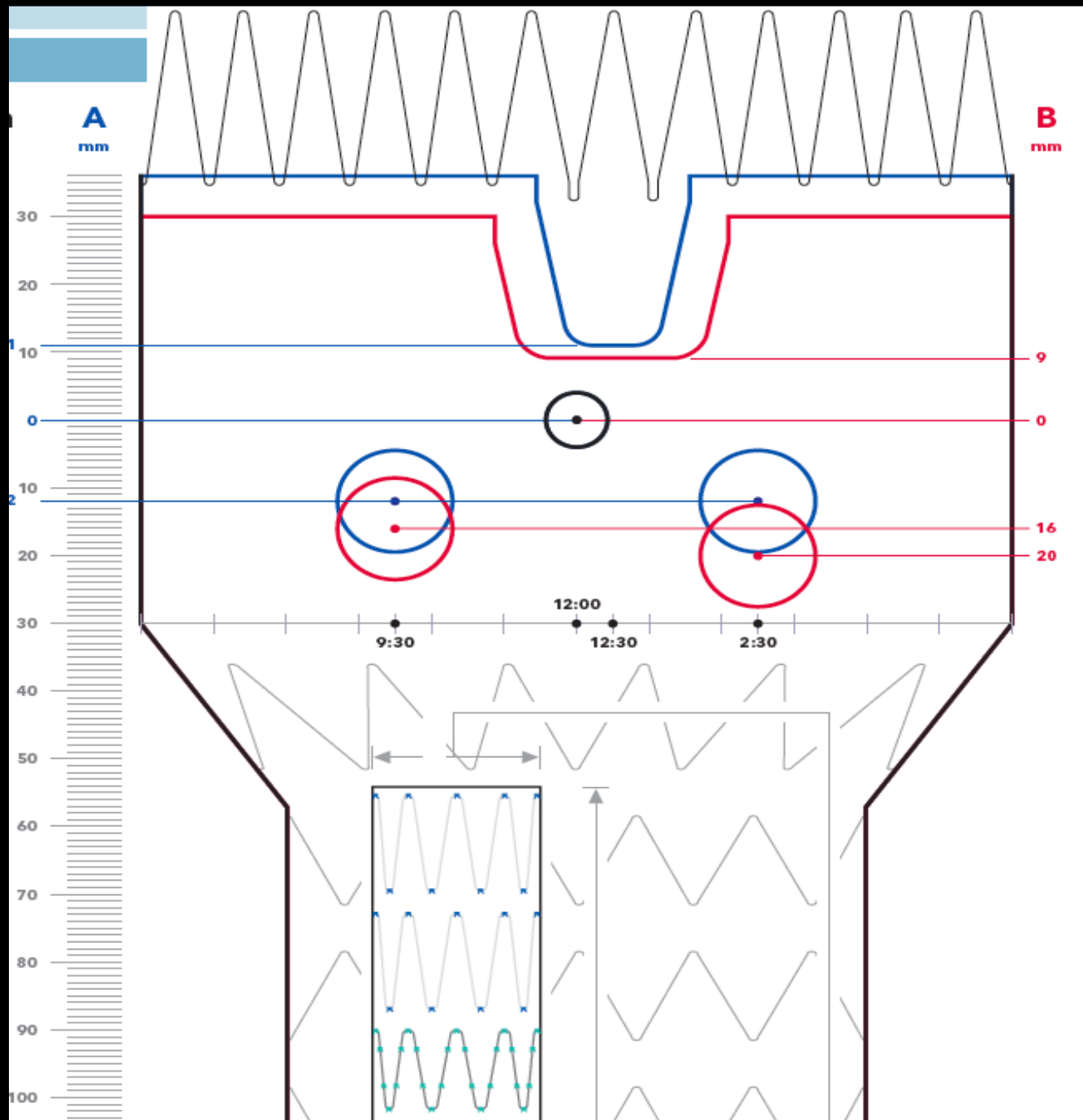
Off-the-Shelf Fenestrated Endografts: A Realistic Option for More Than 70% of Patients With Juxtarenal Aneurysms

Jonathan Sobocinski, MD¹; Guillaume d'Utra, MD¹; Noel O'Brien, MD¹; Marco Midulla, MD²; Blandine Maurel, MD¹; Matthieu Guillou, MD¹; Richard Azzaoui, MD¹; Blayne Roeder³; Timothy A. Resch, MD, PhD⁴; and Stéphan Haulon, MD, PhD¹

¹Vascular Surgery and ²Radiology, Hôpital Cardiologique, CHRU de Lille, France. ³Cook MED Institute, West Lafayette, Indiana, USA. ⁴Vascular Center, Skåne University Hospital, Malmö, Sweden.

Off The Shelf







Contents lists available at [SciVerse ScienceDirect](#)

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journal homepage: www.ejves.com



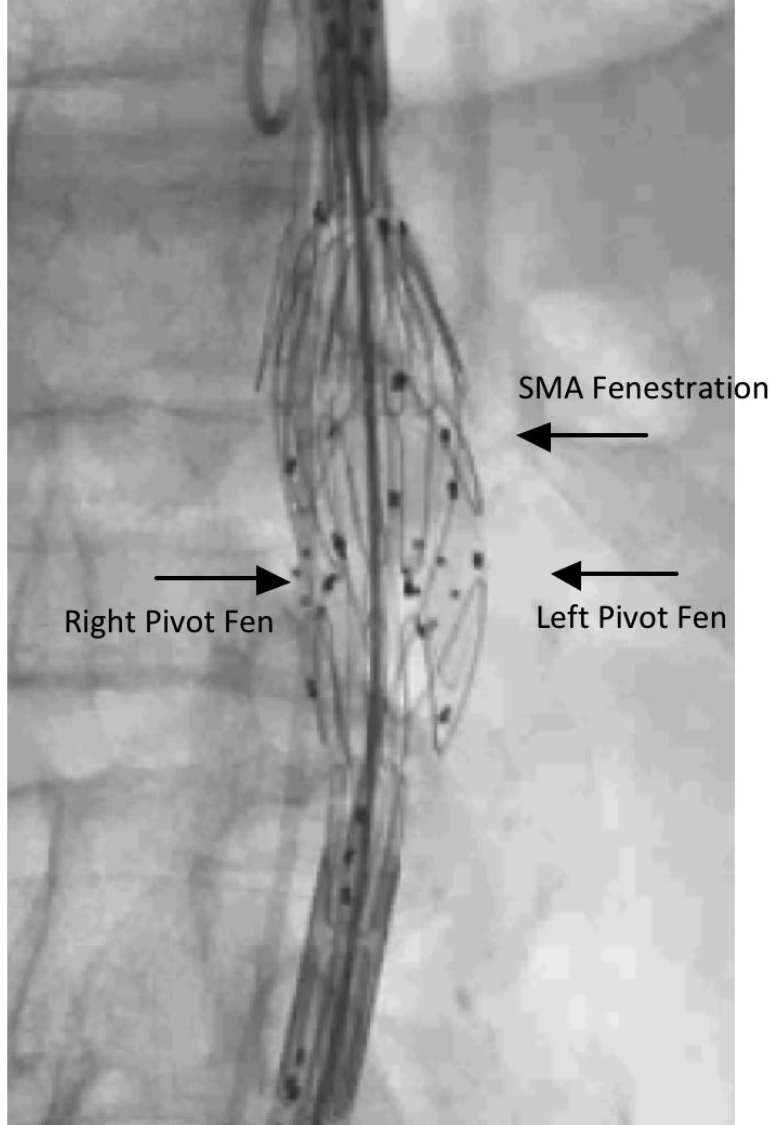
Development of Off-the-shelf Stent Grafts for Juxtarenal Abdominal Aortic Aneurysms

T.A. Resch^{a,*}, N.V. Dias^a, J. Sobocinski^b, B. Sonesson^a, B. Roeder^c, S. Haulon^b

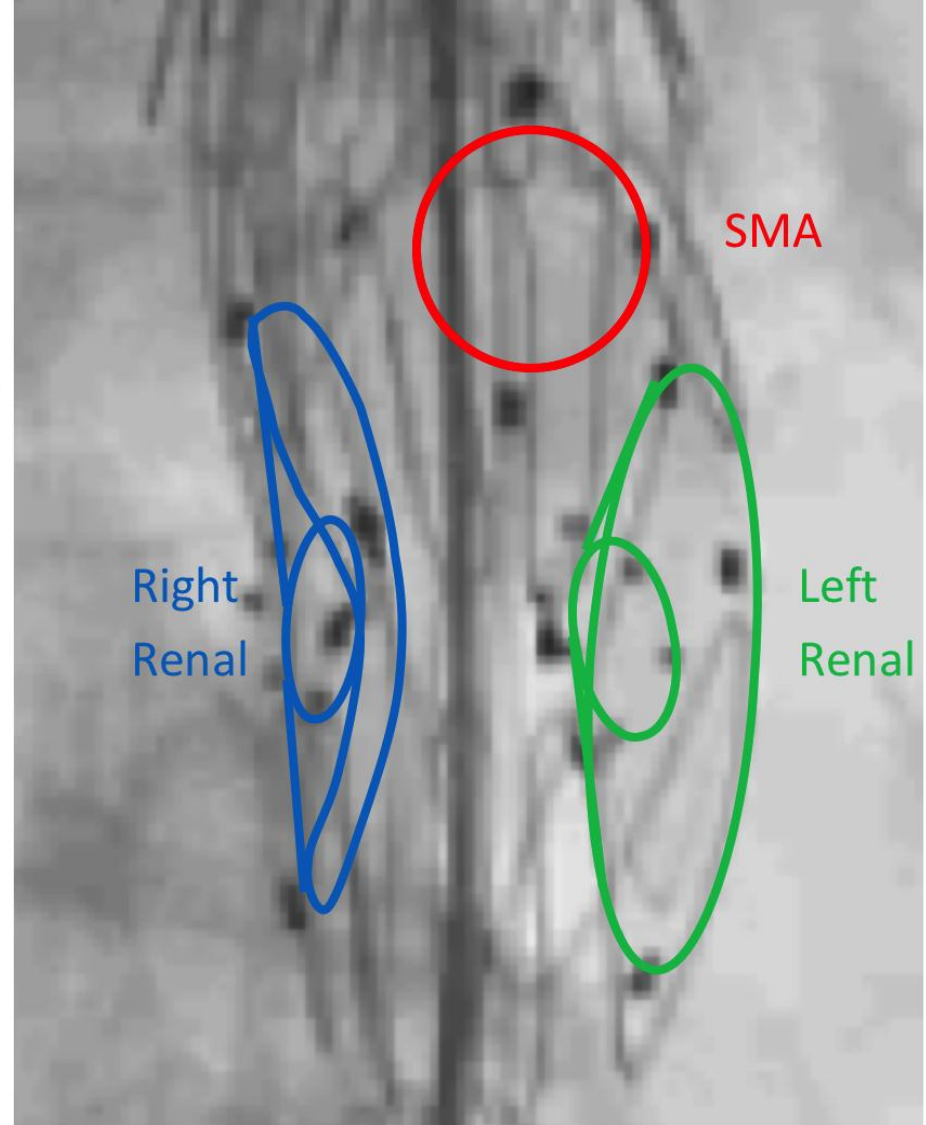
^aVascular Center Malmö-Lund, Skåne University Hospital, Sweden

^bHôpital Cardiologique, CHRU de Lille, France

^cMed Institute, West Lafayette, USA



a.) Graft unsheathed distal to pivot fenestrations



b.) Close up showing locations of pivot fenestrations

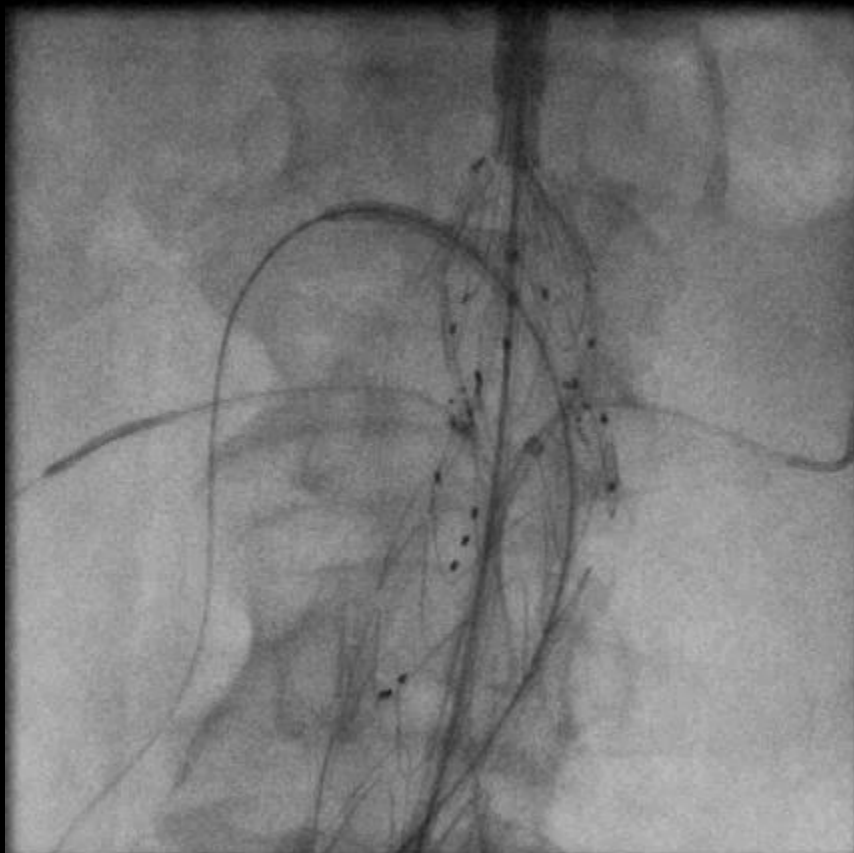
Figure 3. Positions of the SMA and renal pivot fenestrations upon unsheathing of the graft.

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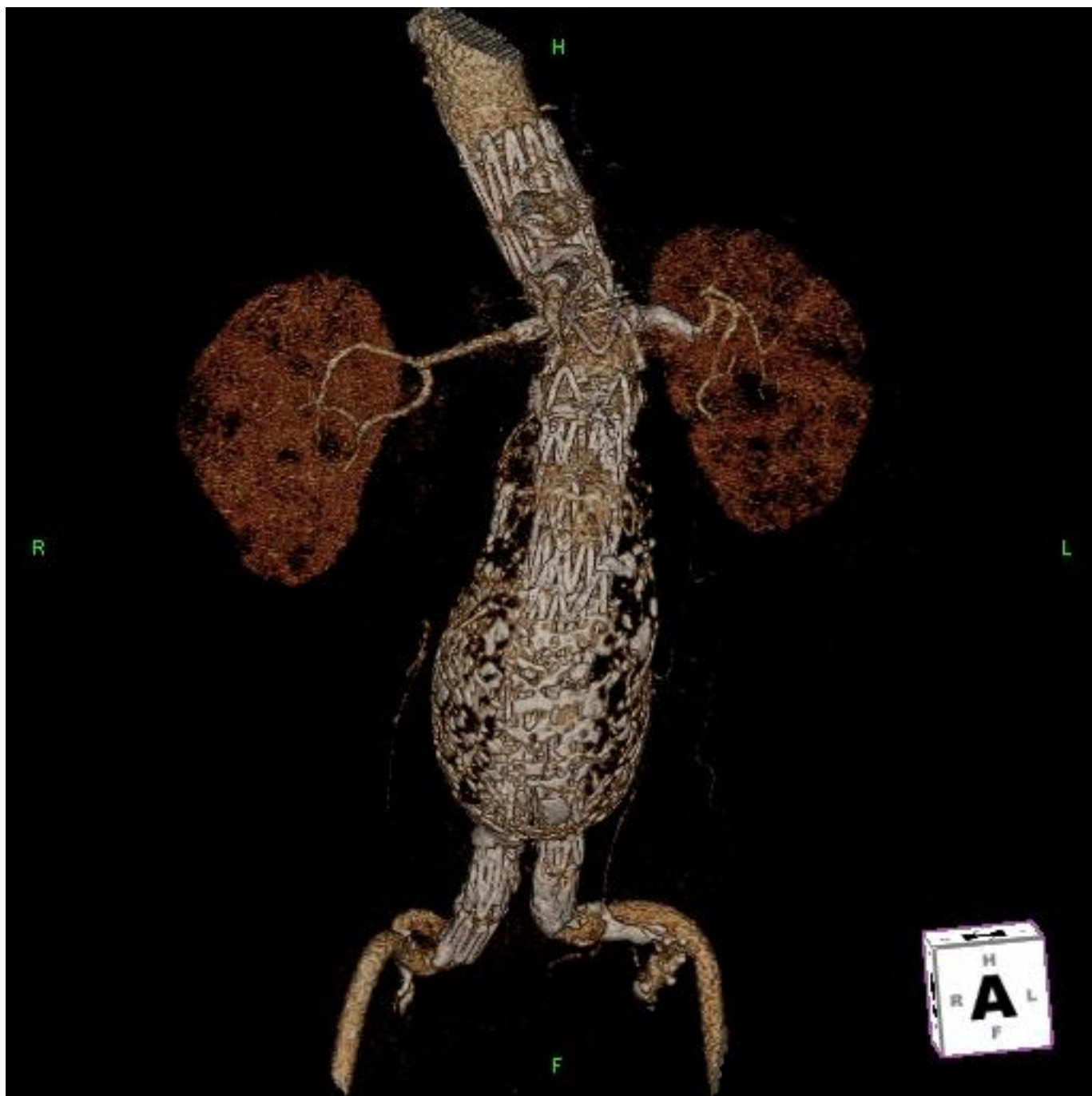
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Off The Shelf - Summary

- Based on Zenith Fenestrated Platform
 - Base Technology works
- Use for juxta, para and suprarenal AAA
 - SMA fenestration
- Unilateral Large Sheath
- Preloaded Fenestrations
- 2 designs fit 70-80%



Thank You!