

# Early Experience of The Fenestrated Anaconda Device

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# Anaconda™ Infra-renal Platform

11 000 cases world wide

Phase II FDA trial in progress



# Infrarenal EVAR – Indications / Limitations

IFU standard endgrafts

neck lengths > 10mm

neck diameter < 31mm

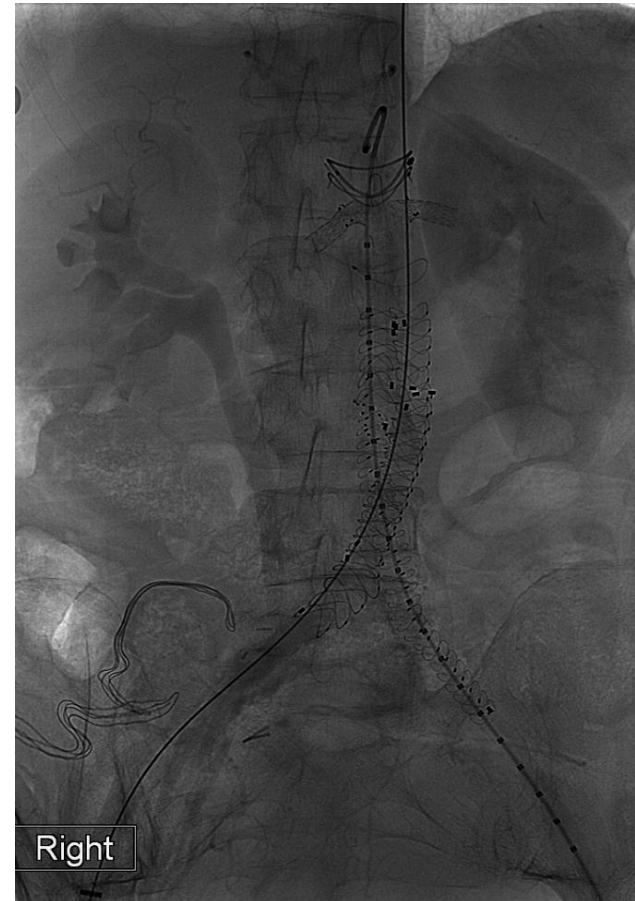
angulation < 90°

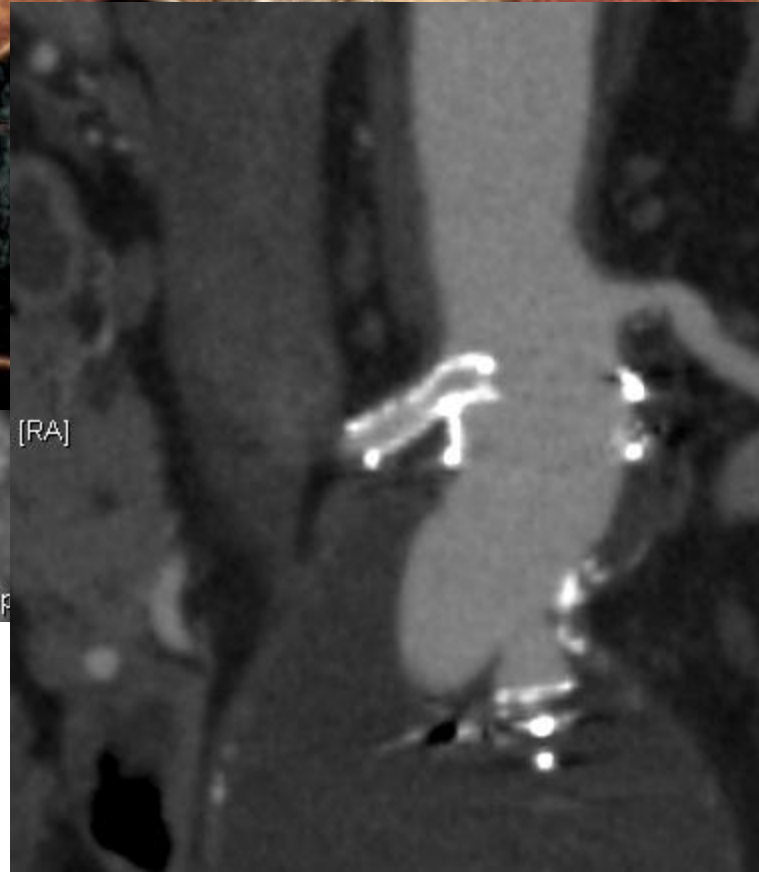
Use beyond the IFU – short / angulated necks

increased endoleaks

increased reinterventions

increased AAA-related mortality long-term





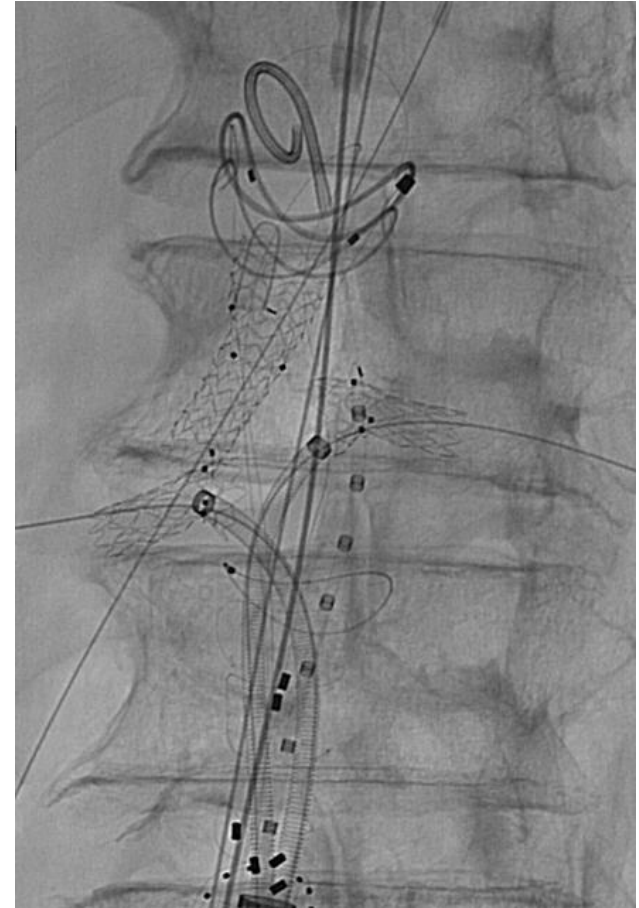
**When there is no neck...**





# BSET Globalstar UK National Registry

- Initial report – 318 patients
- 2 renal fenestration 36%
- 4 fenestration 2.5%
- 30-day mortality - 4.1%
- Generally high risk patients



# Anaconda Fenestrated - Concept

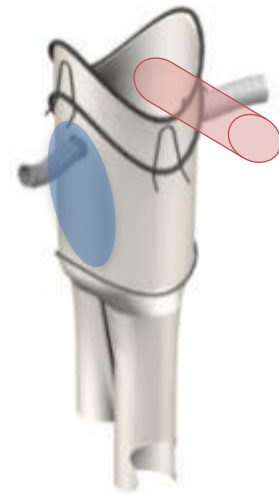
## POTENTIAL ADVANTAGES

- Flexibility
- Accuracy
- Security
- Fenestration size and position
- Cannulation from brachial access



# benefits

- Ring stent configuration
  - Ideal for positioning and locating the SMA or CA
- Unsupported fabric region on body
  - Accurate positioning of fenestrations
  - Flexibility of fabric aids alignment
- Re-positioning
  - Can aid in fenestration alignment
  - Retained during cannulation
  - Offers procedural alternatives

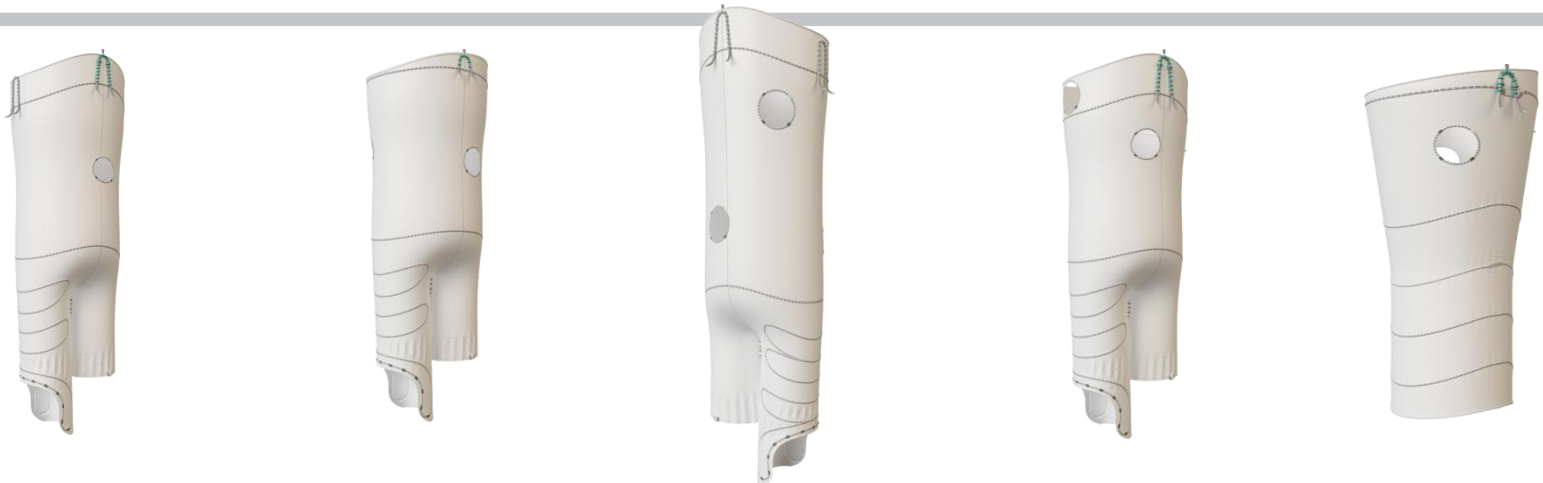




# fenestrated anaconda™

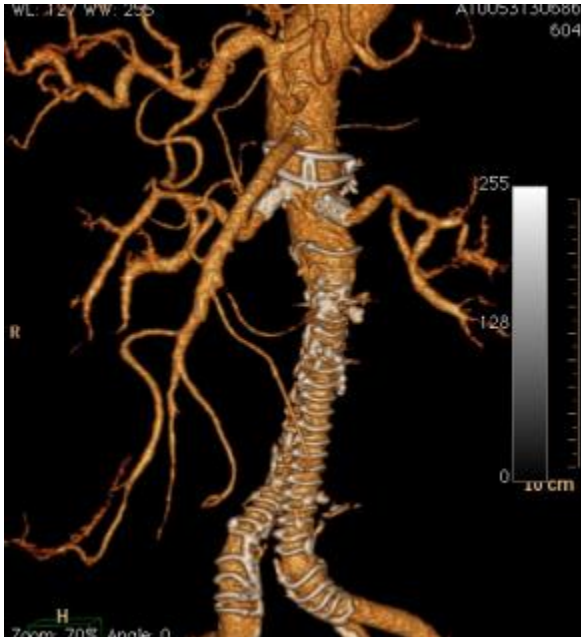
Custom AAA Stent Graft System

## design possibilities



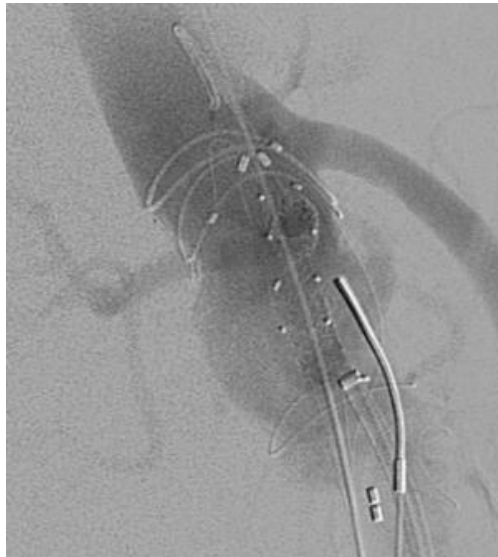
# standard

- Based on Anaconda One-Lok platform
- Body lengthened by 15mm
- SMA cradled in anterior valley



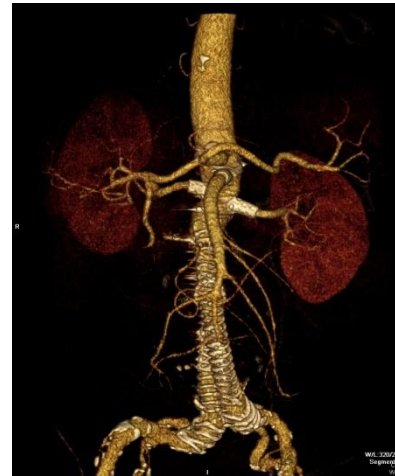
# augmented valley

- Proximal ring tilted towards anterior
- Anterior valley hook removed or reduced in size
- SMA/cealic artery cradled in augmented anterior valley



# long body

- Body length increased by up to 45mm
- Up to 4 fenestrations positionable in large fabric region
- For 4 fenestration cases, device can be designed with peaks in A-P orientation
- Additional mid-rings can be added if required
- Can feature augmented valley



# fenestrated valley

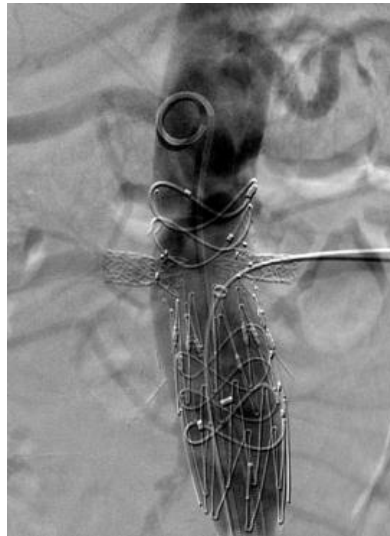
- SMA fenestration between proximal rings
- Celiac artery cradled in anterior valley
- No anterior valley hook





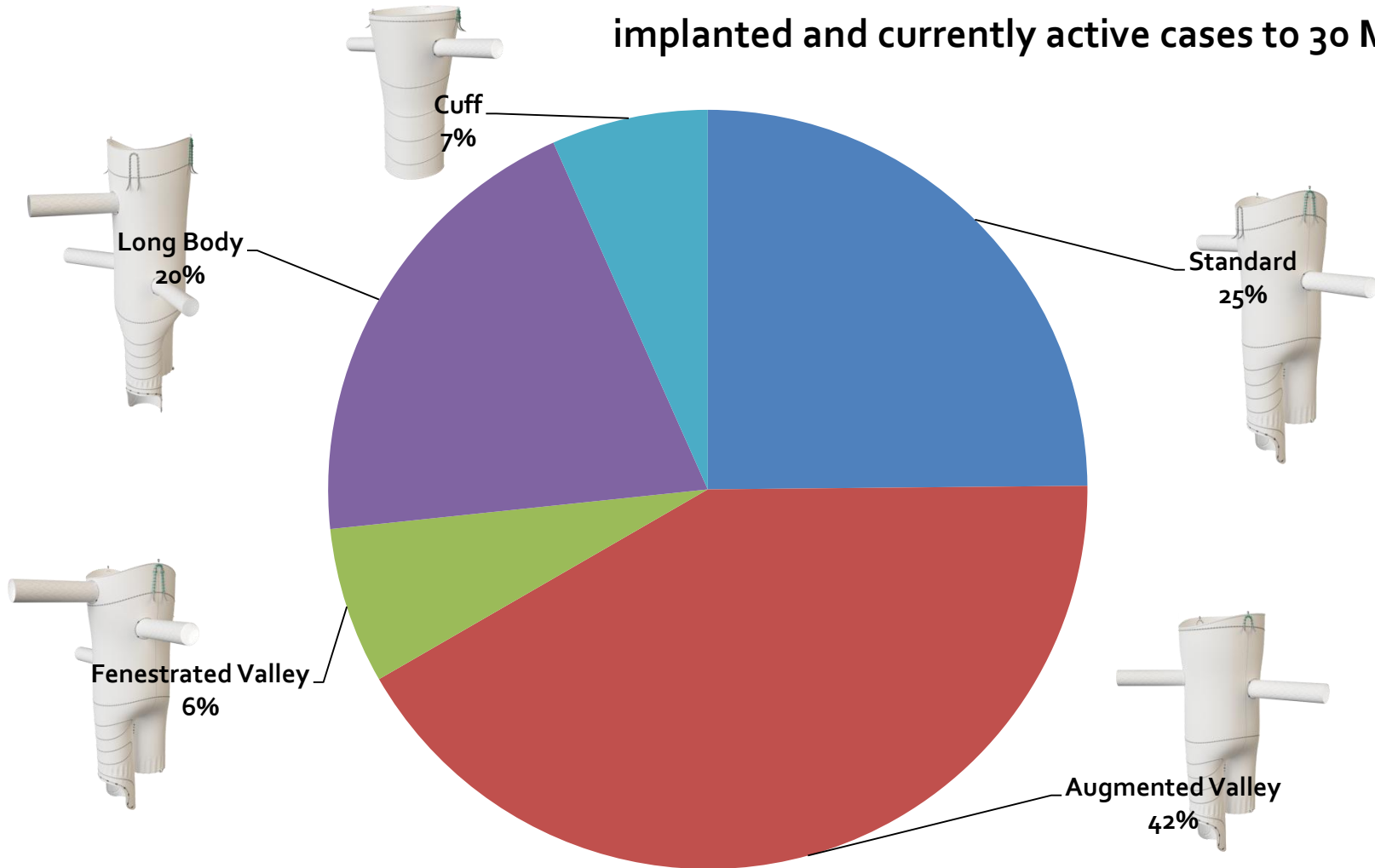
# fenestrated cuff

- Proximal end re-positionable
- Distal end docked inside existing device
- Can have up to 4 fenestrations
- Can feature augmented valley
- Can be tapered or flared to suit specific anatomy

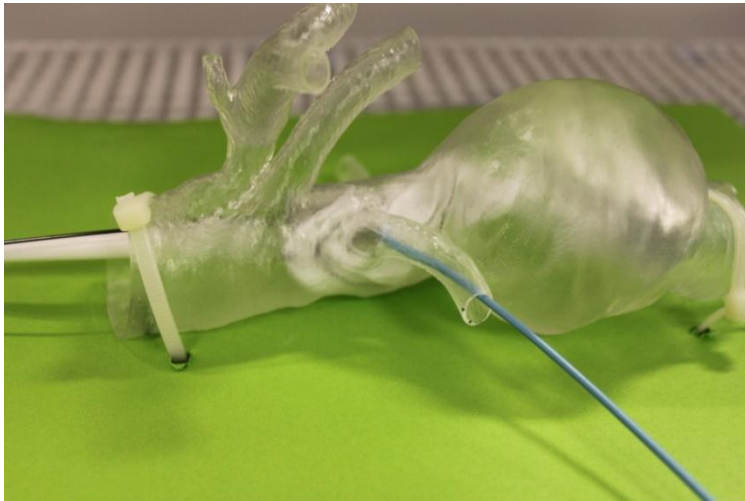
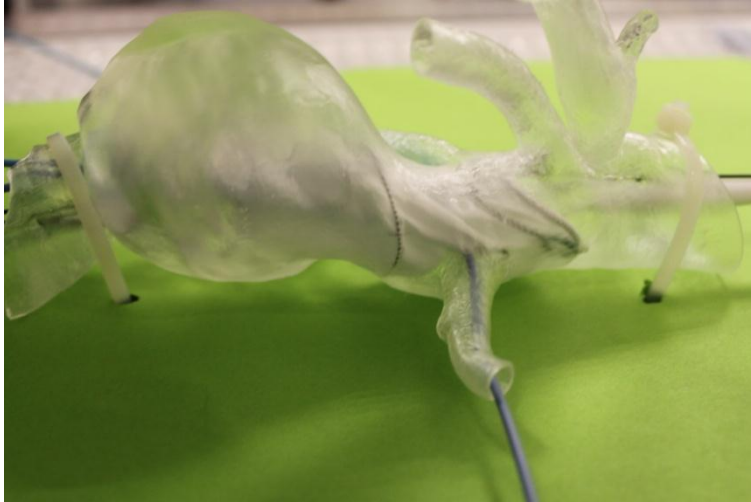


# device type breakdown

implanted and currently active cases to 30 May 2012

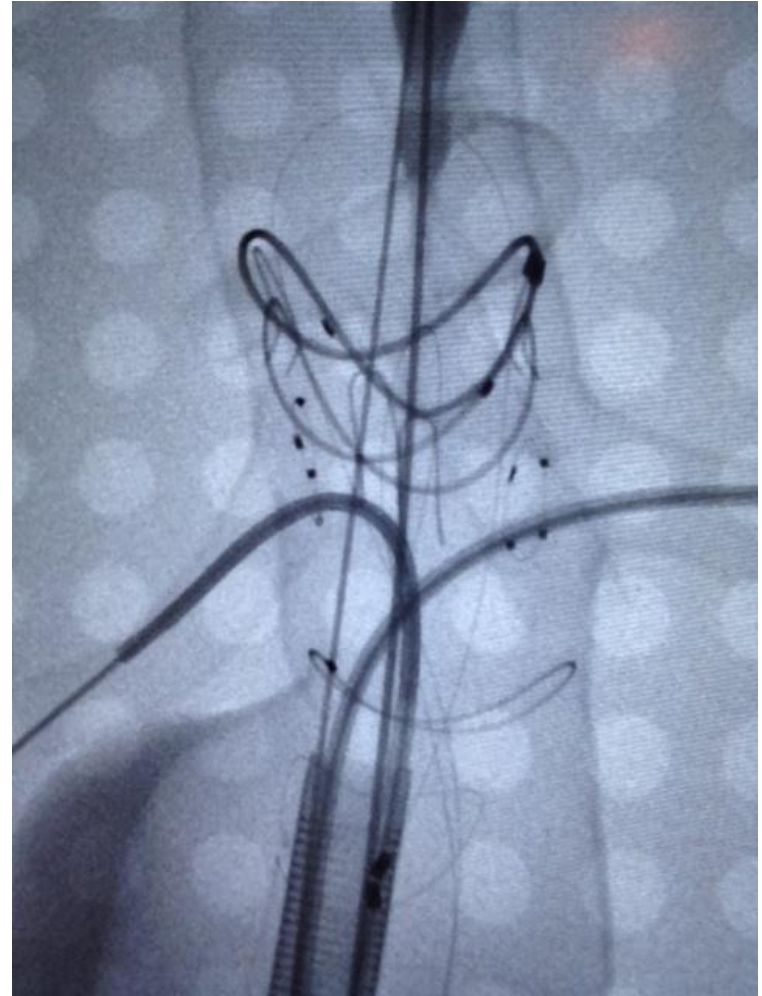


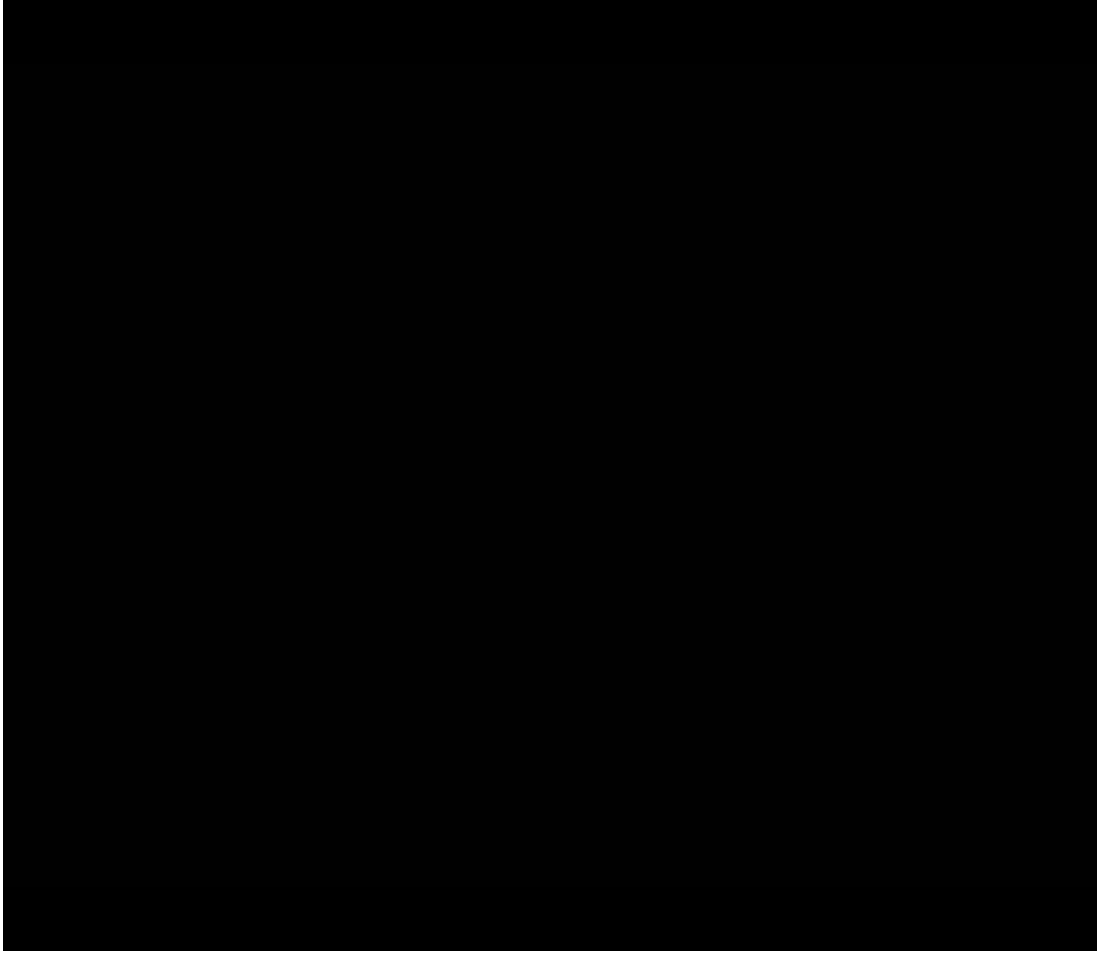
# testing: prototype deployment



- Test re-positioning in anatomy
- Check alignment of fenestrations
- Check ability to cannulate fenestrations
- Check for suitable SMA to proximal ring clearance
- Check device landing zone in aorta

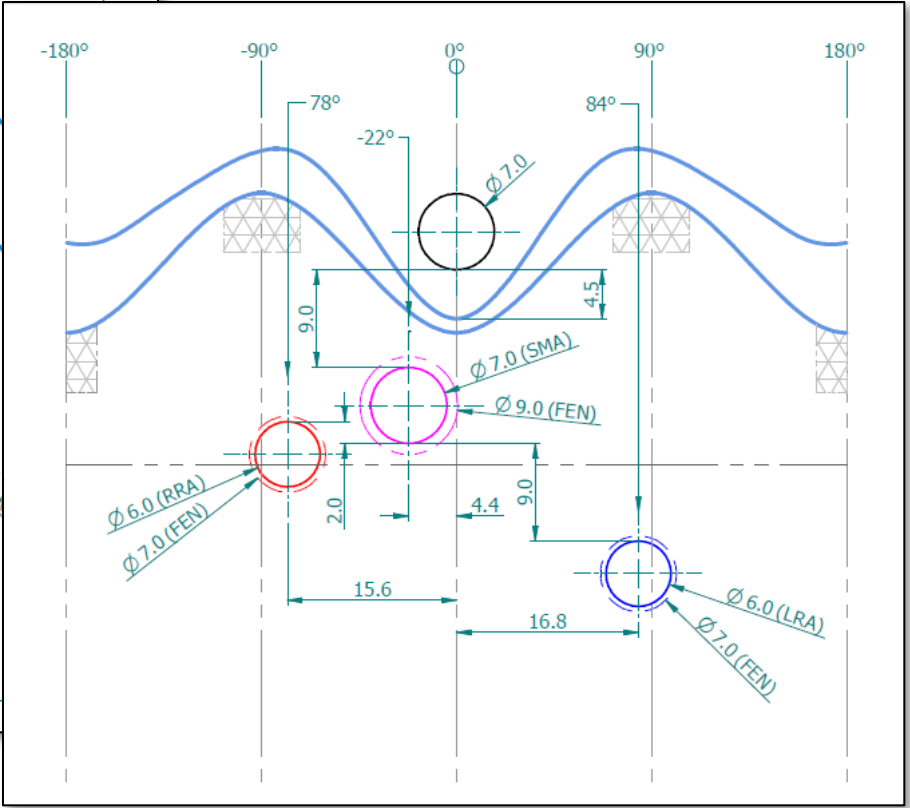
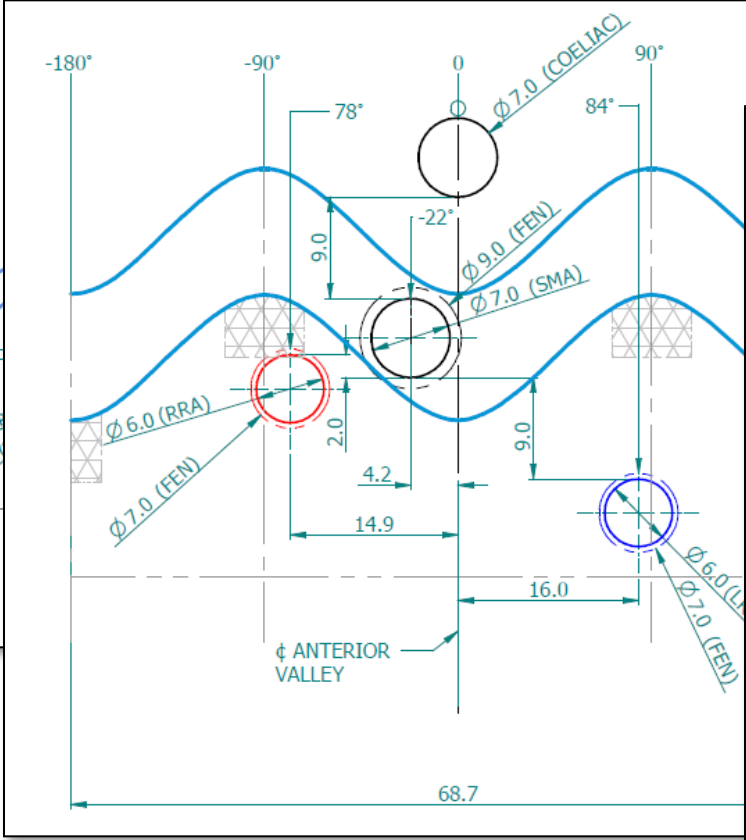
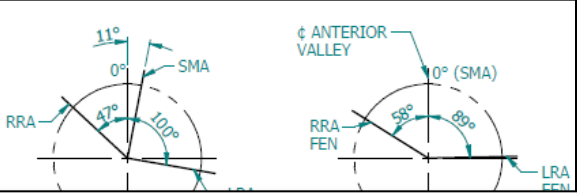
# Clinician testing: under fluoroscopy



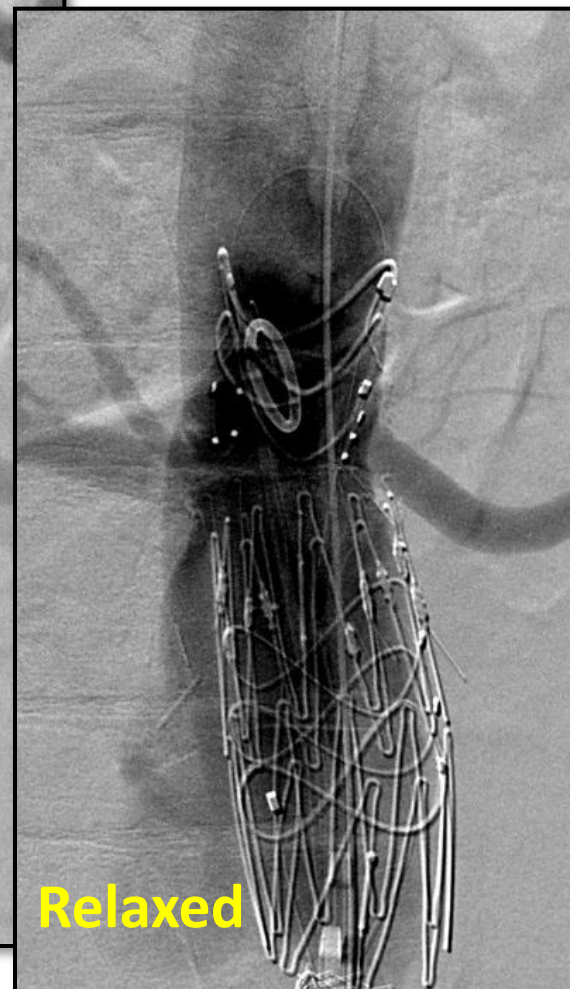
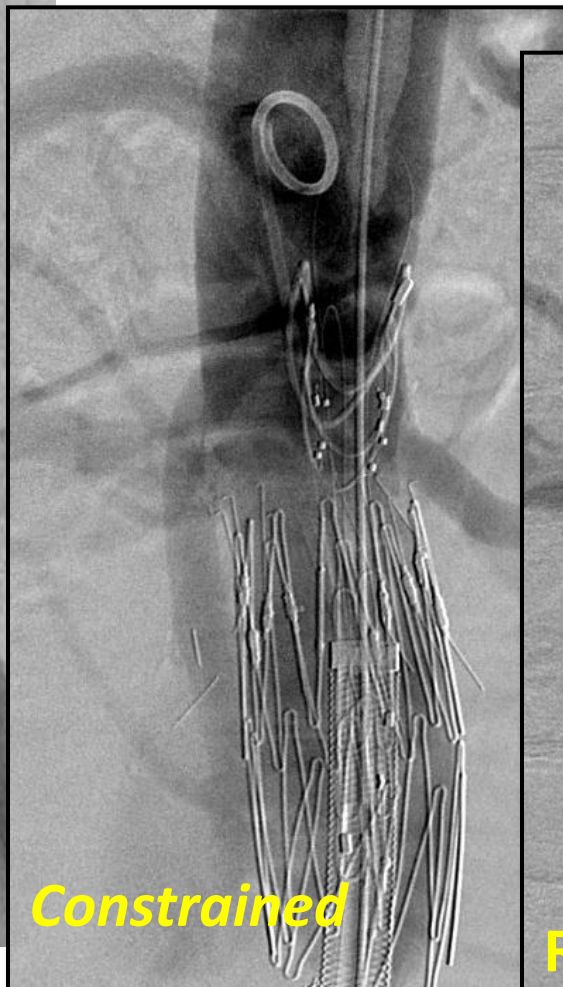
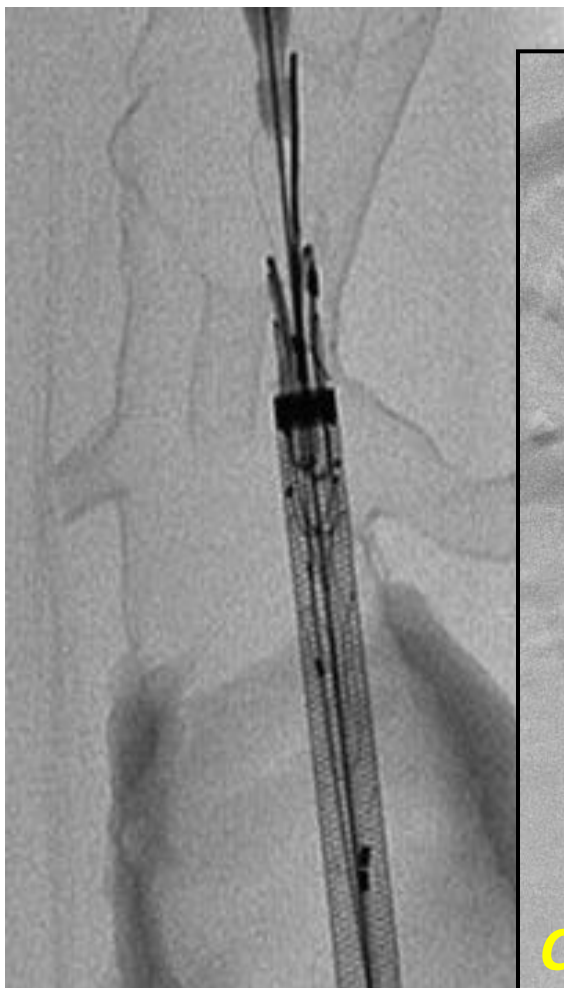




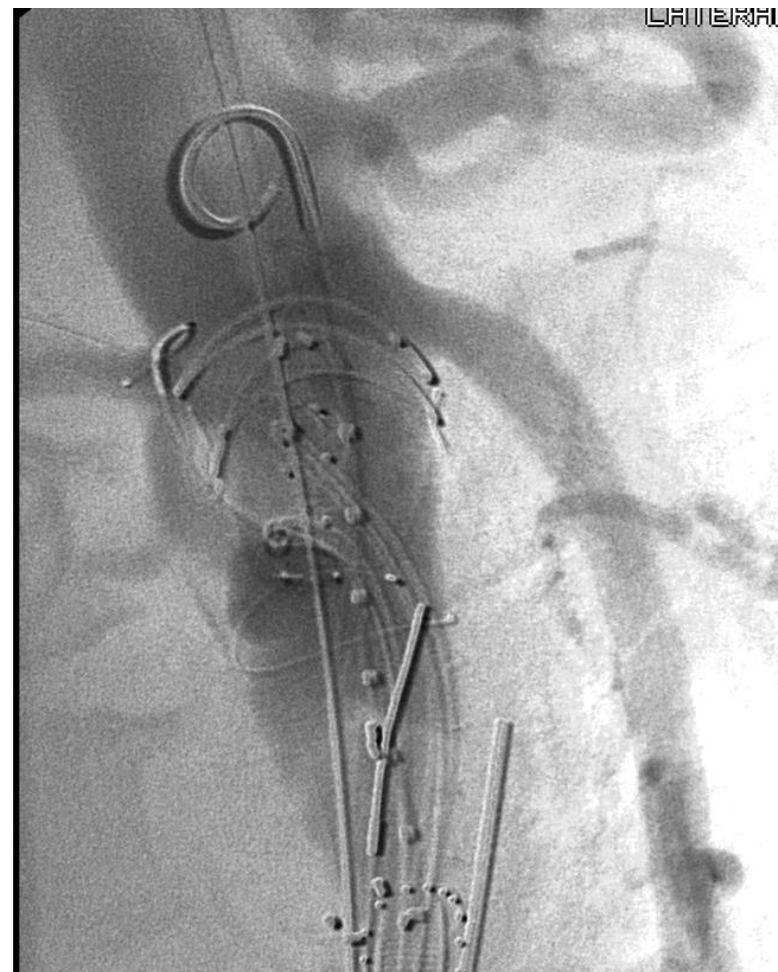
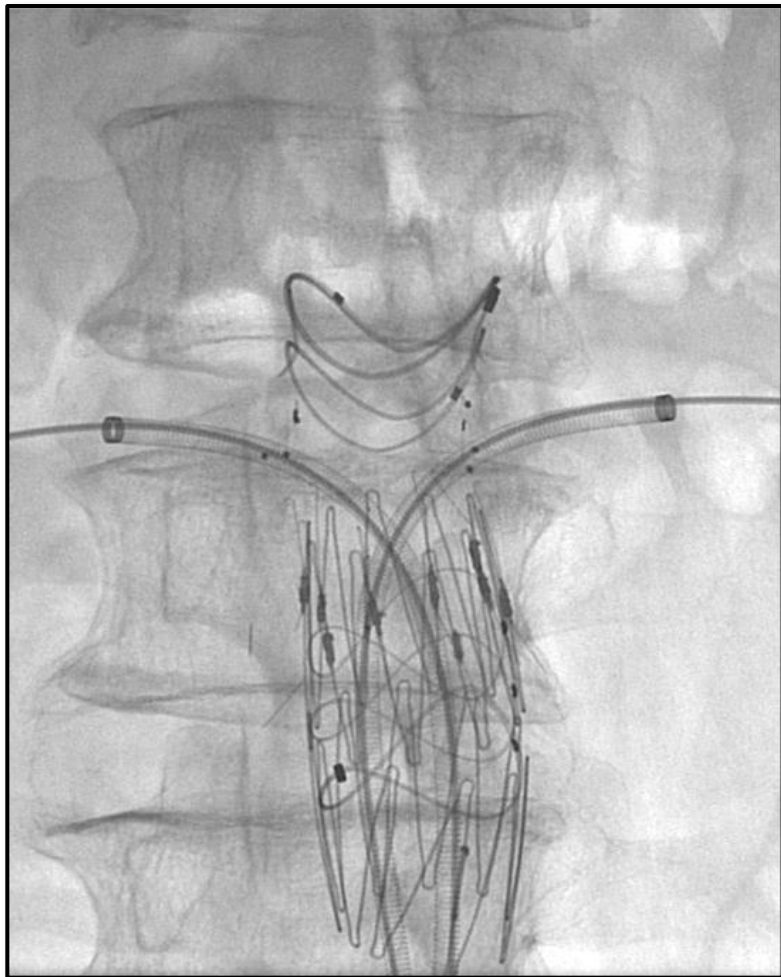
# Effect of vessel origin angle on heights



# Deployment sequence

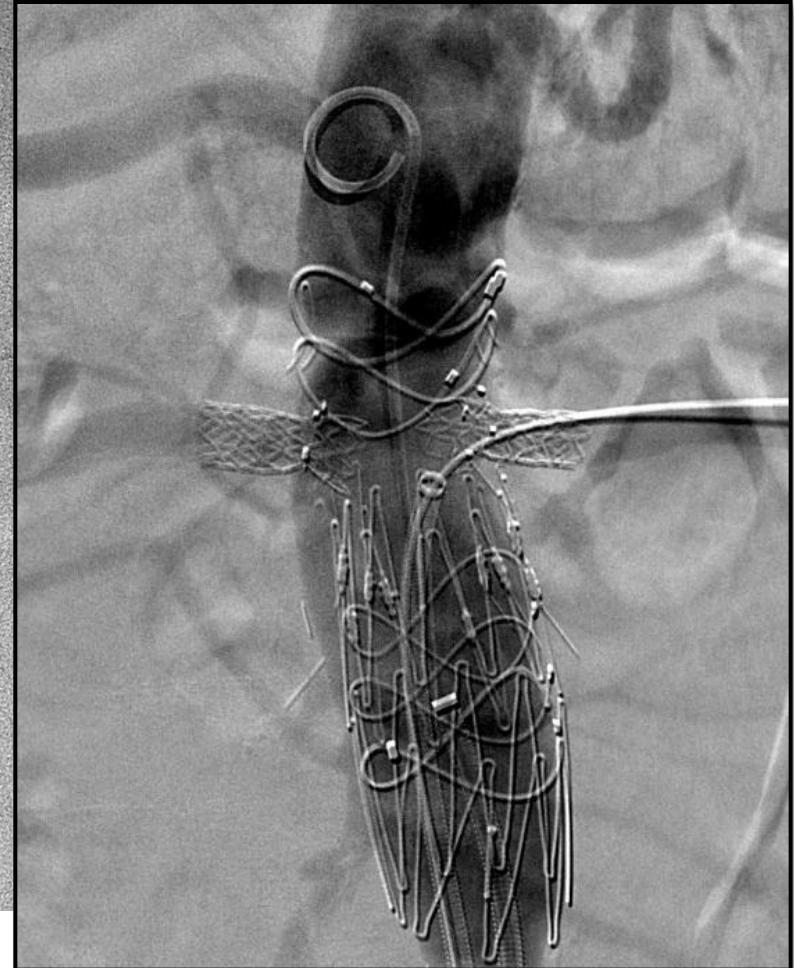
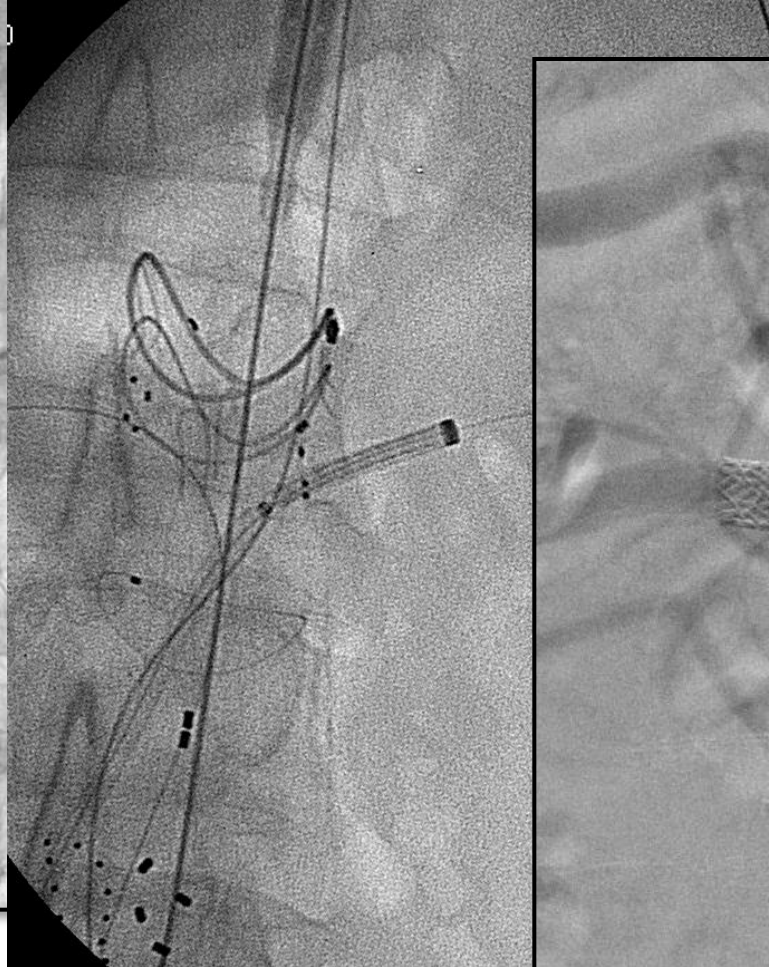
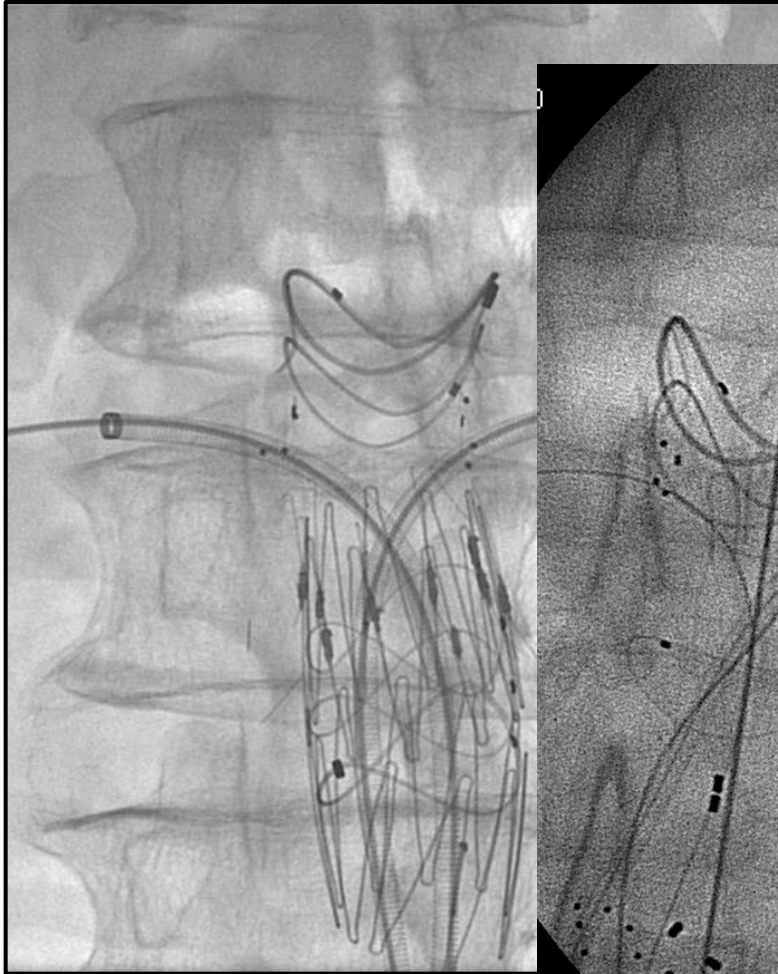


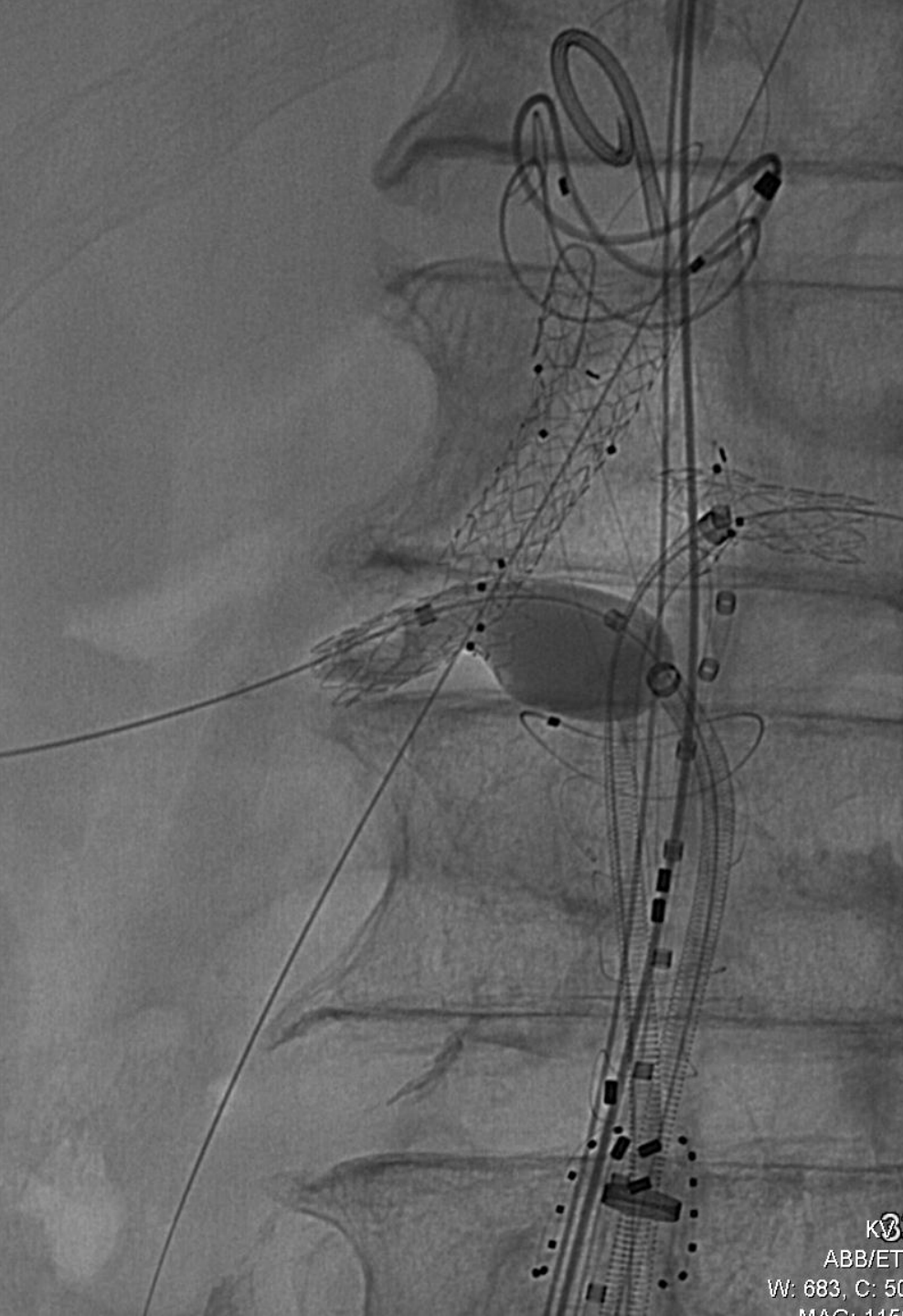
# Deployment Sequence



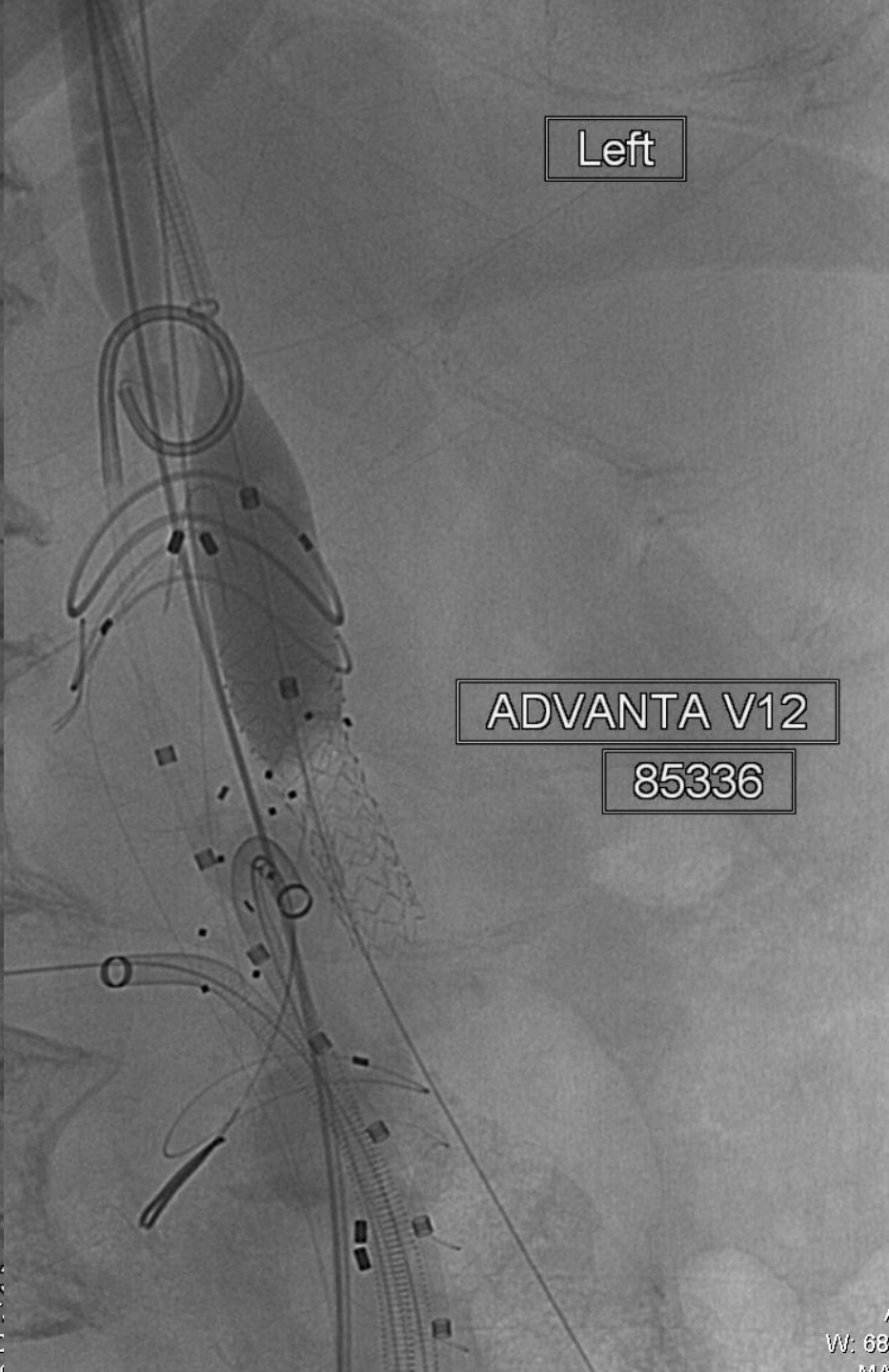


# Deployment Sequence





KV: 70  
ABB/ET  
W: 683, C: 50  
MAG: 115%



Left

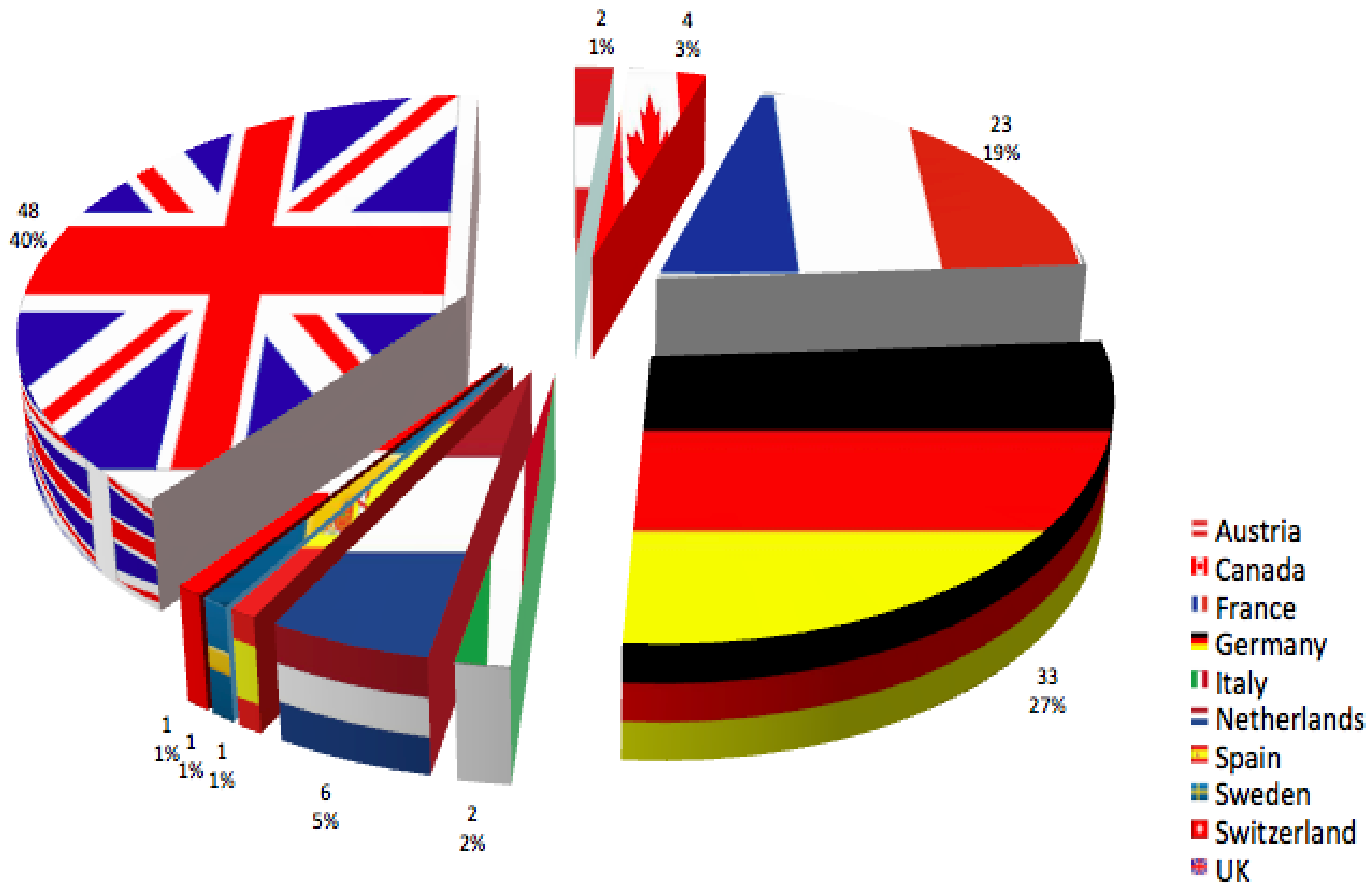
ADVANTA V12

85336

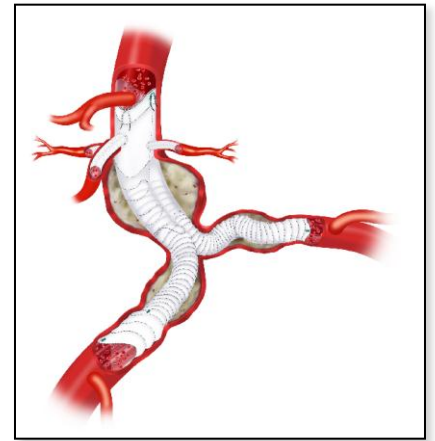
W: 683



# Fenestrated Anaconda Implants To Date



# Global Registry



- Web site: [www.fenestratedanaconda.com](http://www.fenestratedanaconda.com)
- Participants: **Global**
- Patients recruitment: **prospective and retrospective for early cases**



# End Points

- Primary
  - Technical success
  - AAA exclusion
  - Target vessel patency
- Secondary
  - Mortality
  - Type I or III endoleaks
  - Stentgraft migration



# Current Registry Status

Cases: 121 patients implanted

Males: 103 (85%)

Females: 18 (15%)

Mean age: 73 years (range 51-91 years)

\*none or incomplete data for 24/121 patients

A decorative graphic consisting of a grey, curved, teardrop-like shape with a horizontal line through its center, positioned to the left of the main title.

# Current Status Device Type

## Fenestrations

## No. of cases

1 vessel

5

2 vessels

87

3 vessels

27

4 vessels

2

(7 fenestrated cuffs)

121 cases completed



# Average Screening and Procedure Time

Category	Time in minutes
Average fluoroscopy time	75
Length Total Procedure	217



# Technical Success

Outcome	Percentage
Conversion to open repair	0%
Additional endovascular procedure	6.4%
Additional surgical procedure	4.8%

# Details of the 30 day deaths\*

Case	Post op day of death	Comments
1	12	Myocardial infarction
2	6	Myocardial infarction
3	29	Cerebral hemorrhage
4	1	Colonic Ischemia
5	21	Multi organ failure
6	6	Colonic Ischemia

\*3 post discharge deaths, 3 procedural related



# Evolution of Aneurysm Sac

Followed at 12 months*	Percentage
Stable	28.6%
Increase	0
Decreased	71.4%

\* 24 patients with 12 months follow up



# Summary Current Status

**Technical success : 99%**

(356 target vessel, 3 failed stenting, all achieved initial wire access)

**No persistent type Ia or type III endoleak**

**Target vessel patency at follow up : 98.4%**

2 renal artery occlusion at follow up

**24 patients at 1yr**

**No migration, No type Ia or type III endoleak**



# CONCLUSION

- Versatility of Anaconda graft ideal for FEVAR
- Technically complex procedure
- Expertise and teamwork required



# CONCLUSION

- Satisfactory immediate and short-term results
- Long term follow up required
- Publication of results from analysis of Registry