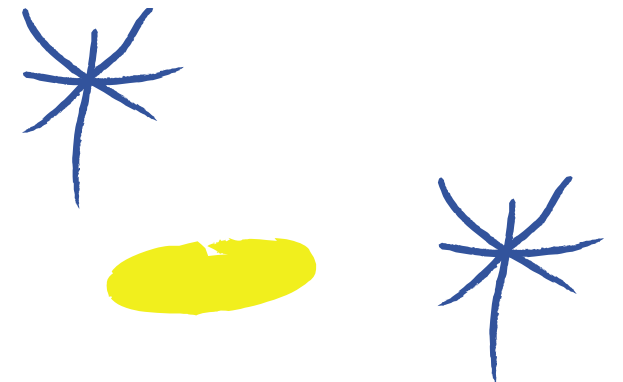


Advances and Perspectives of Arch Endografts

Stéphan Haulon,

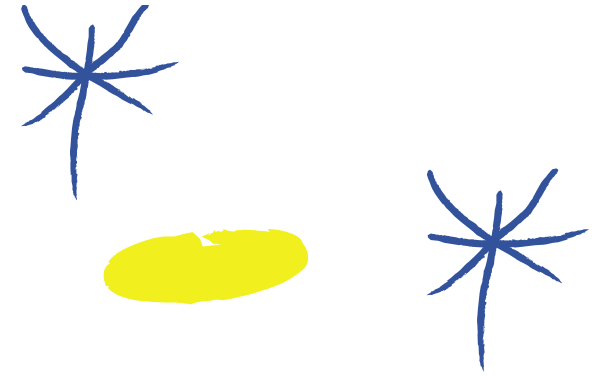
D. Fabre, S. Mussot, O. Mercier, D. Mitilian, E. Fadel

Centre de l'Aorte, Hôpital Marie Lannelongue,
Université Paris Sud, France



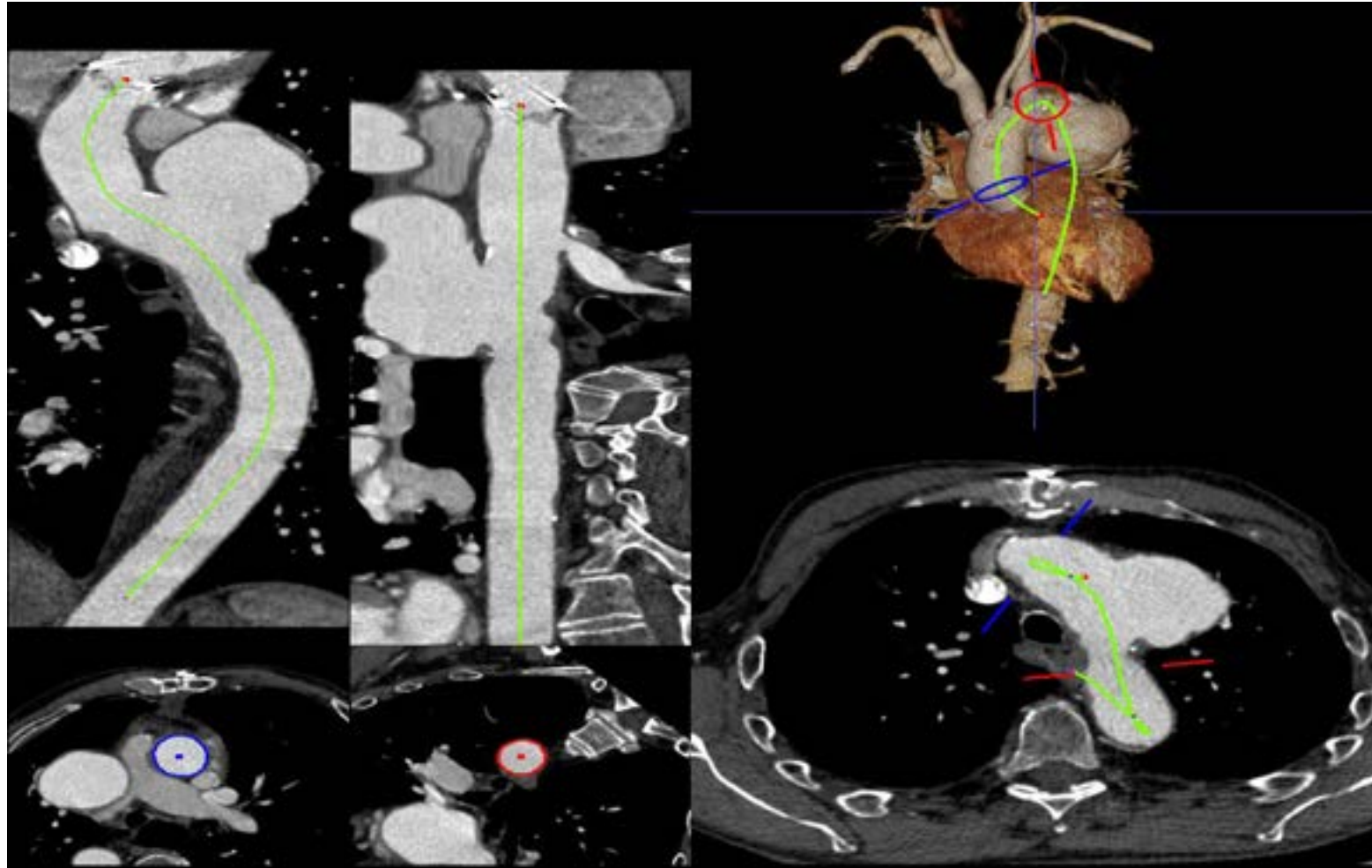


Disclosures



- Research support, Consulting
 - Cook Medical, GE Healthcare, Bentley

Preoperative measurements with CPR on workstation



Videos not available



Editor's Choice — Subsequent Results for Arch Aneurysm Repair with Inner Branched Endografts, ☆

R. Spear ^a, S. Haulon ^{a,*}, T. Ohki ^b, N. Tsilimparis ^c, Y. Kanaoka ^b, C.P.E. Milne ^a, S. Debus ^c, R. Takizawa ^b, T. Kölbel ^c

^a Aortic Centre, CHRU Lille, France

^b Vascular Surgery, Jikei University, Tokyo, Japan

^c German Aortic Center, University Heart Center Hamburg, Germany

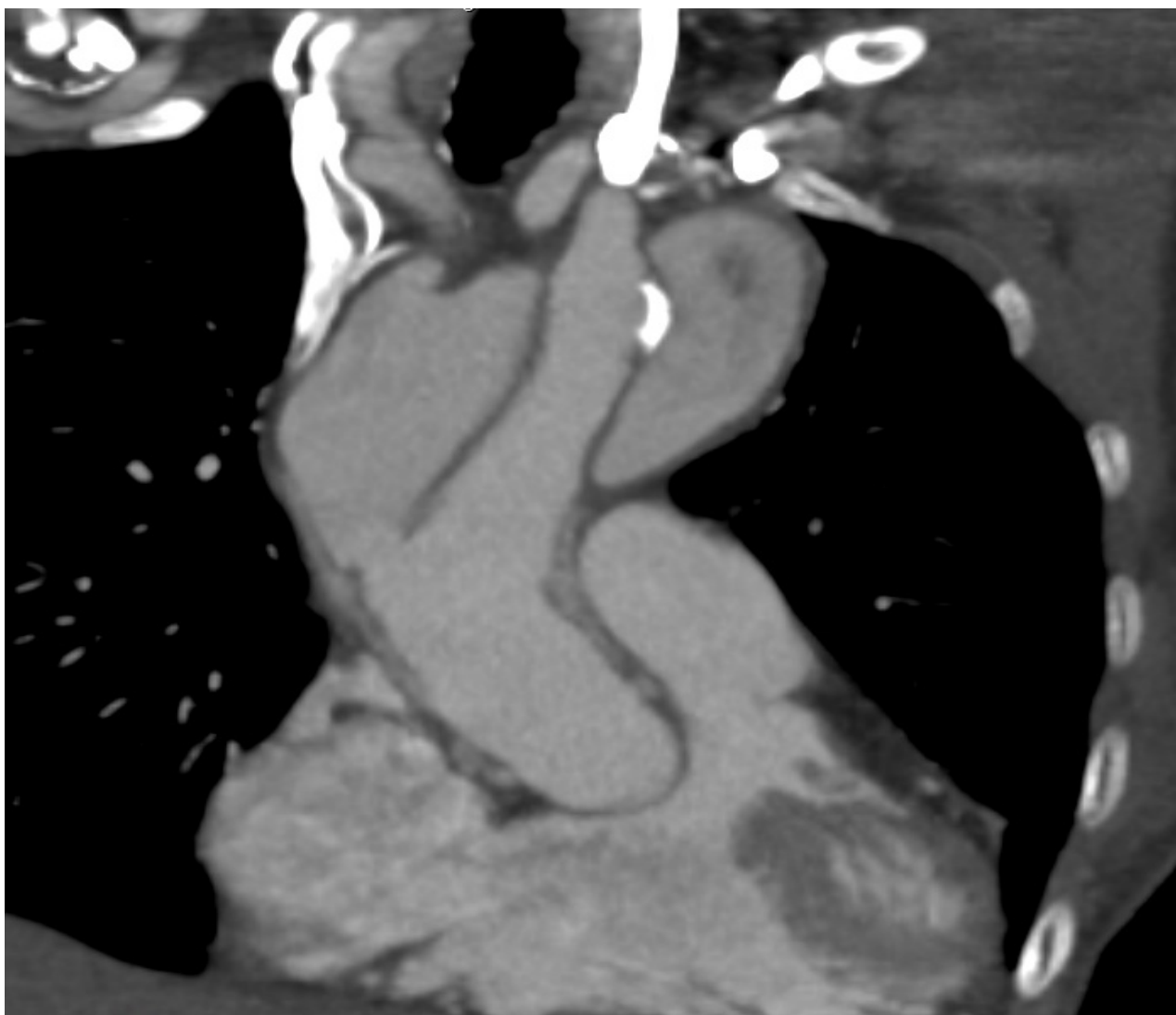
WHAT THIS STUDY ADDS

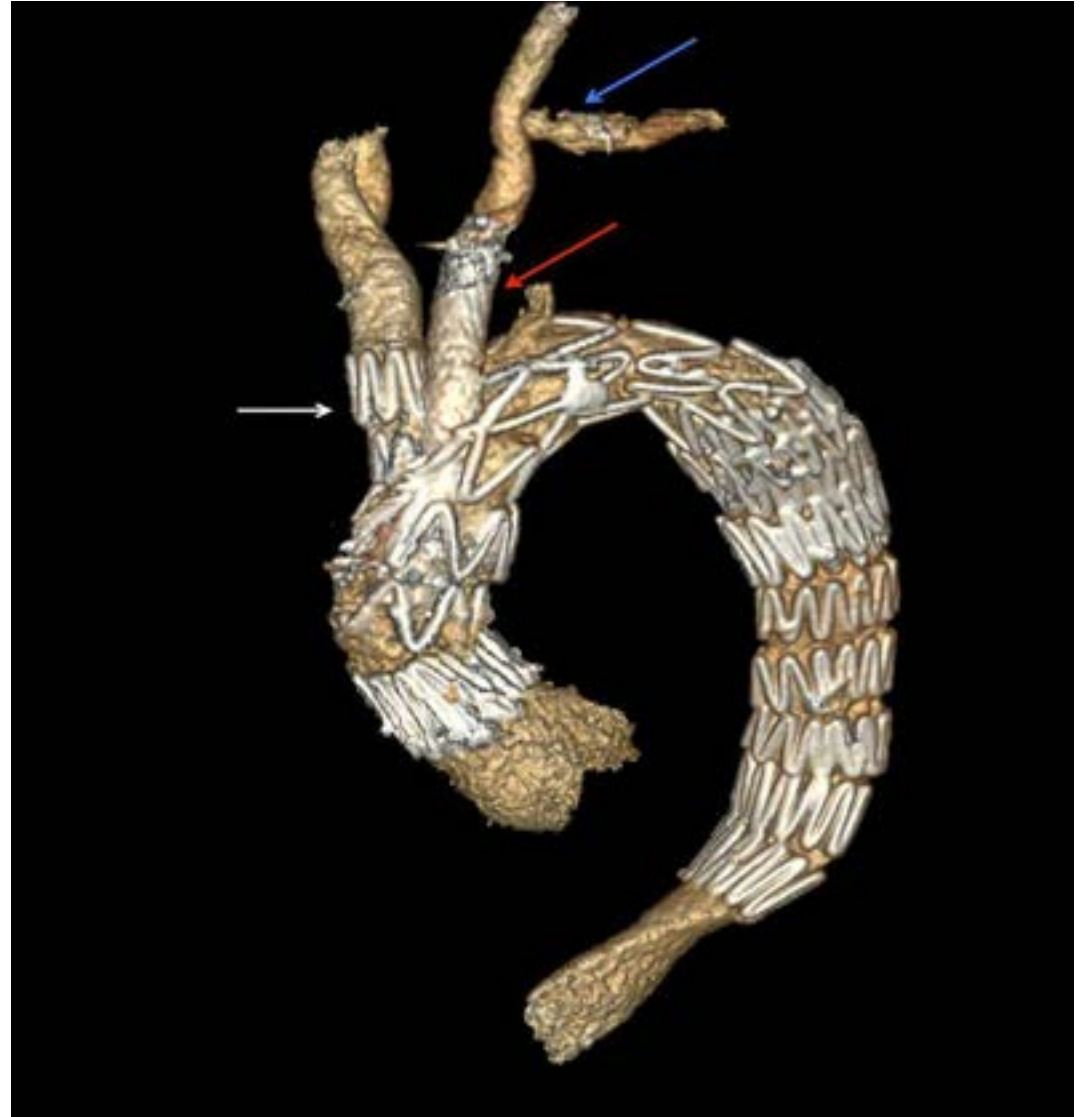
This study reports early outcomes following endovascular repair of arch aneurysms in patients unfit for open surgery and is the first evaluation of arch aneurysm endovascular repair performed after the initial learning curve.

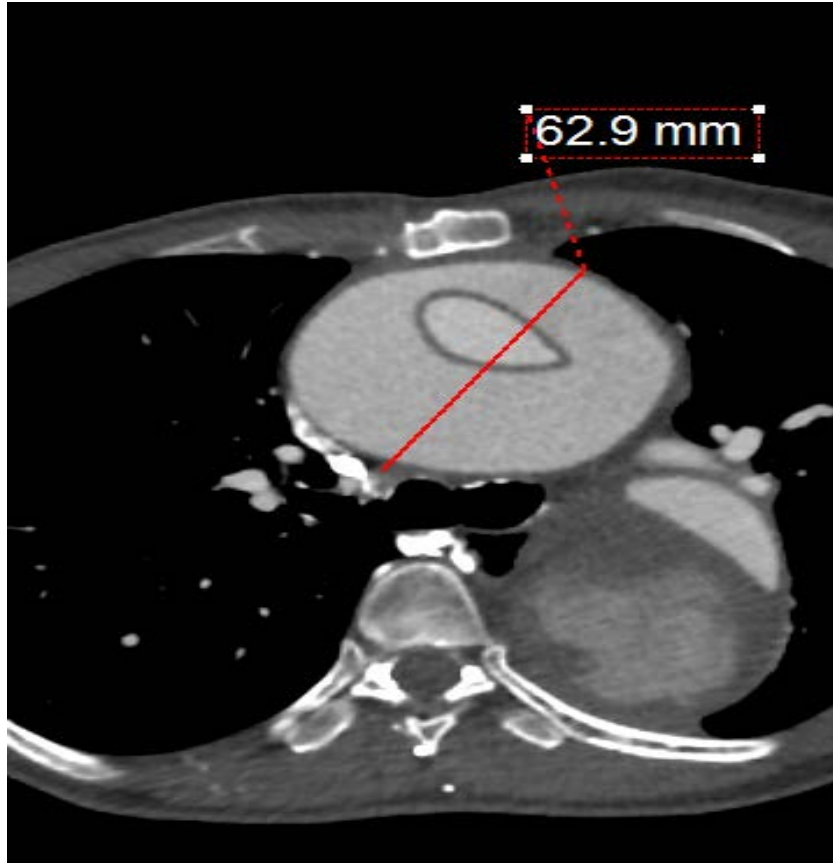


Post Type A Repair

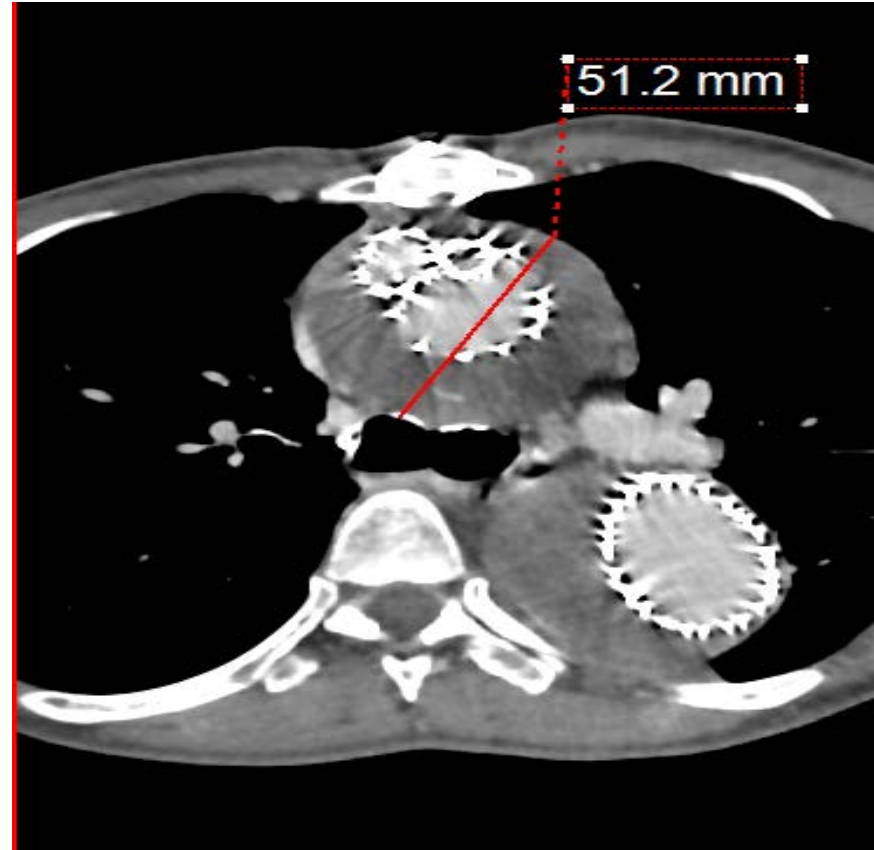






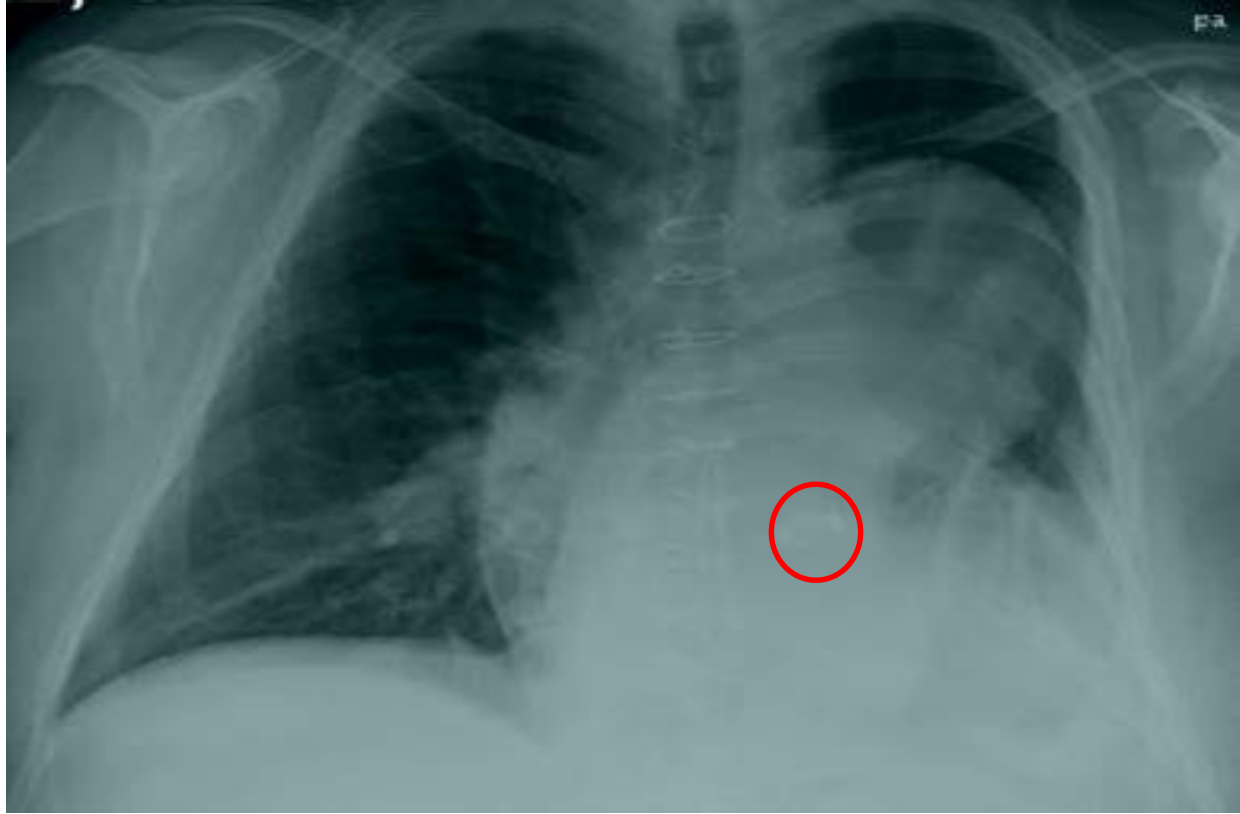


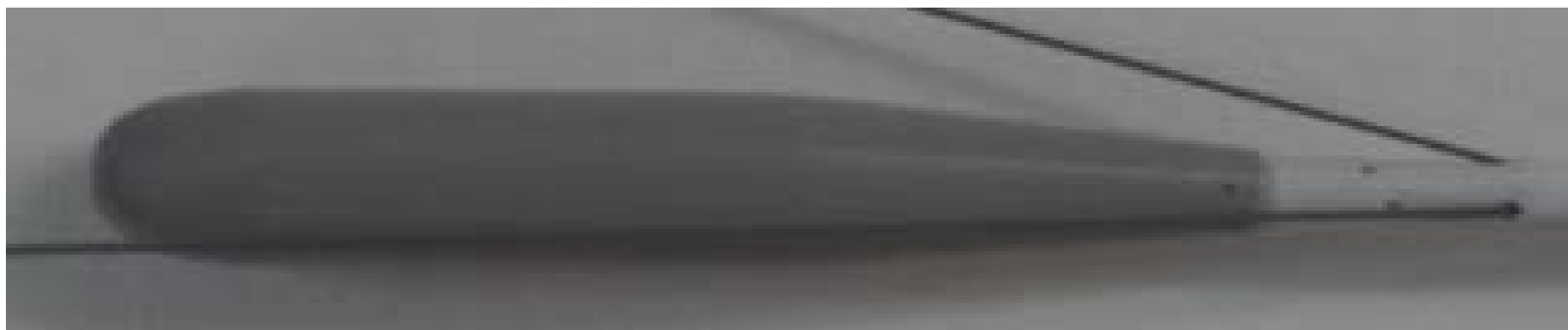
Pre-operative CT



2-year control





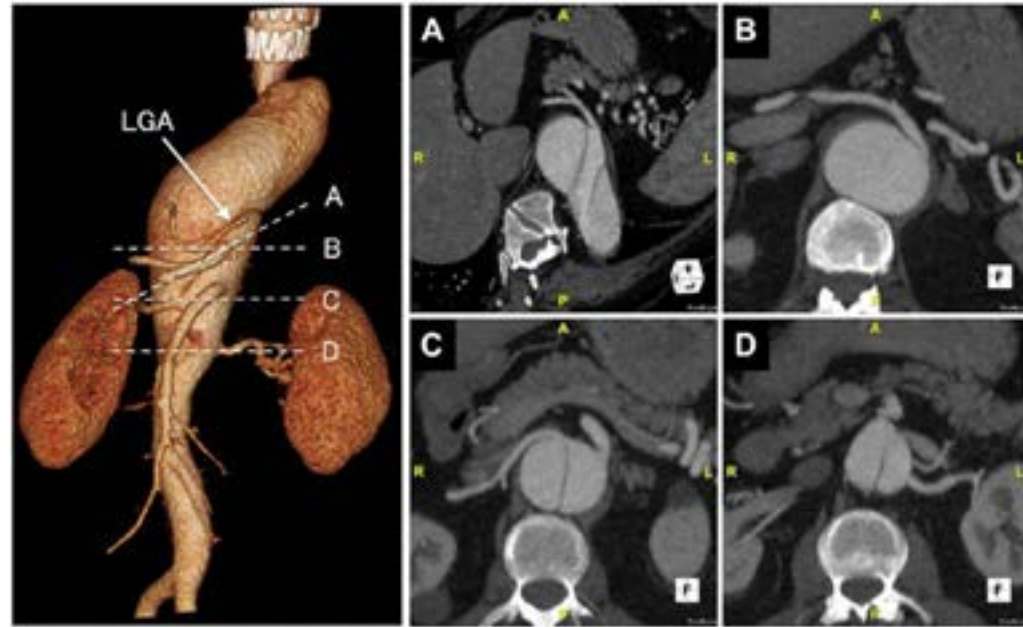
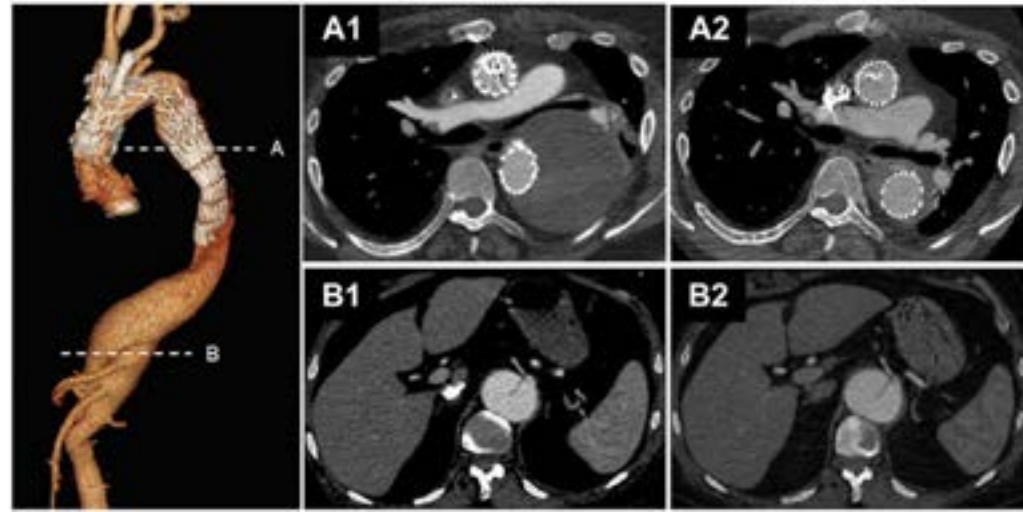


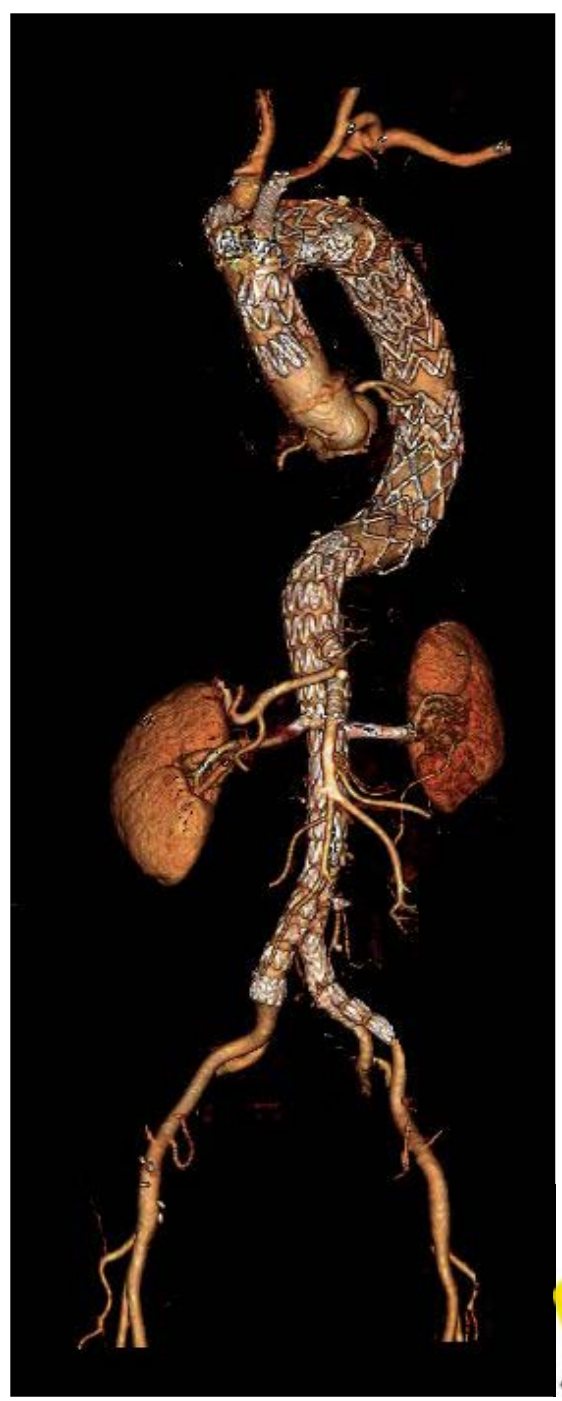
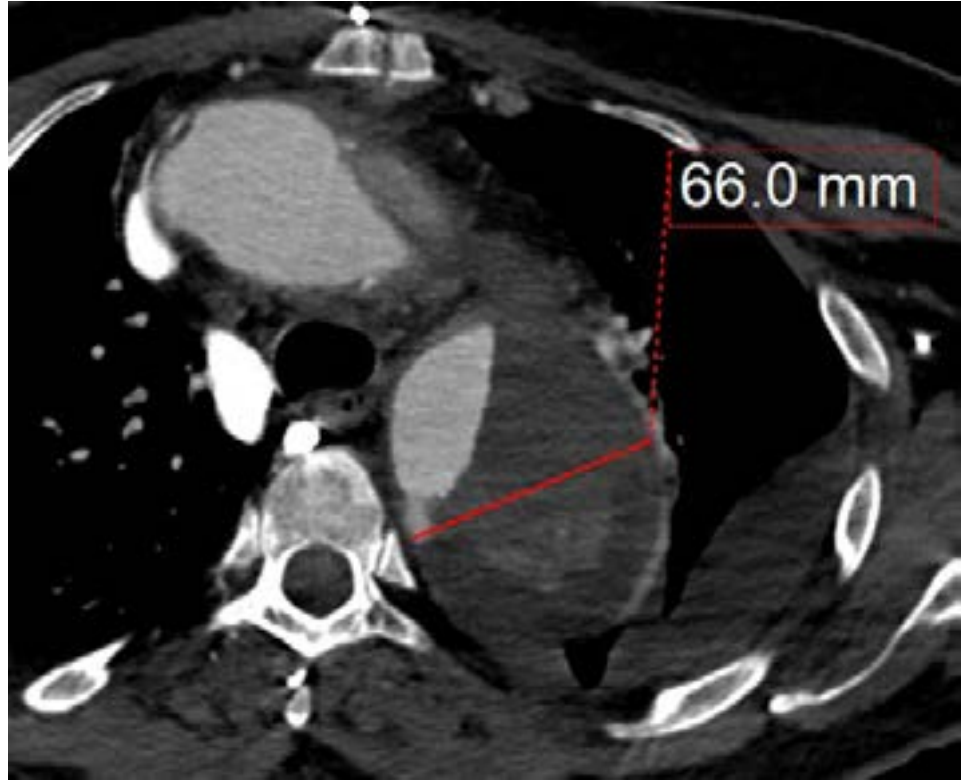
Videos not available

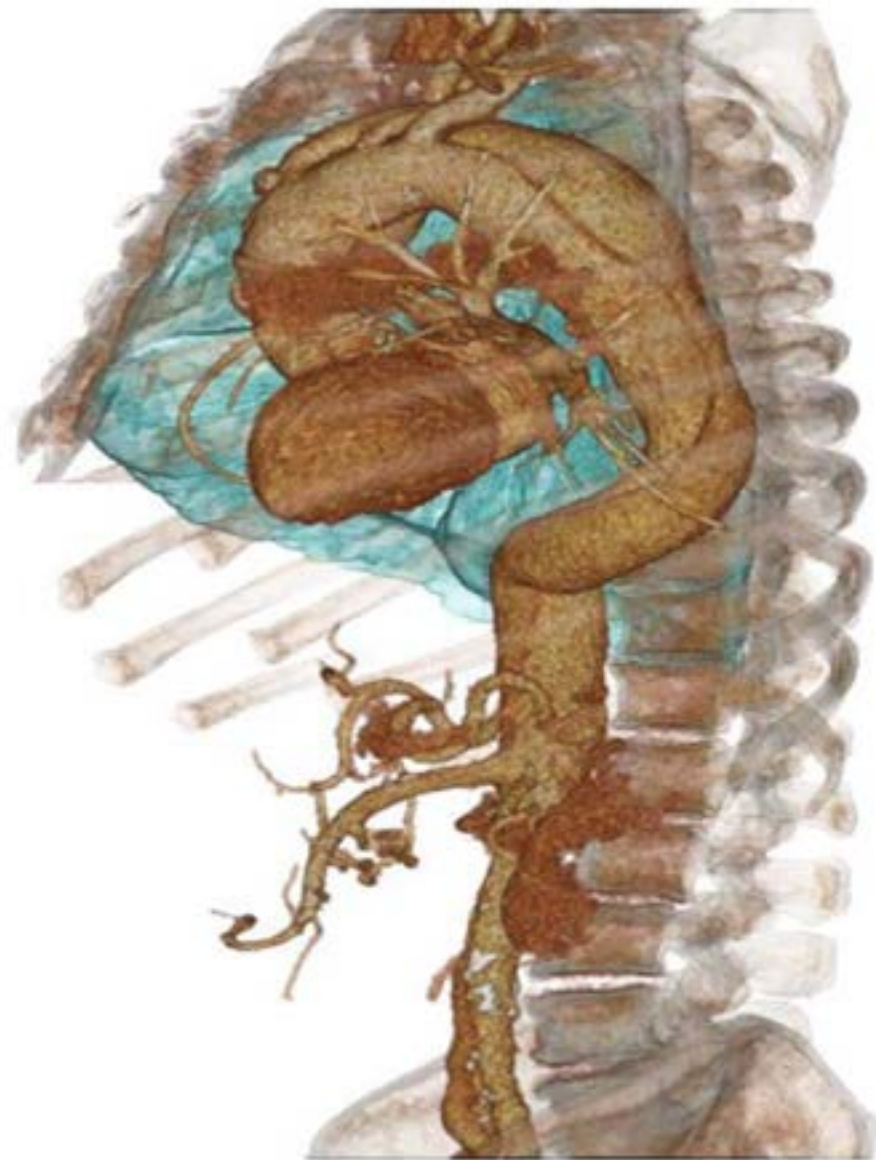
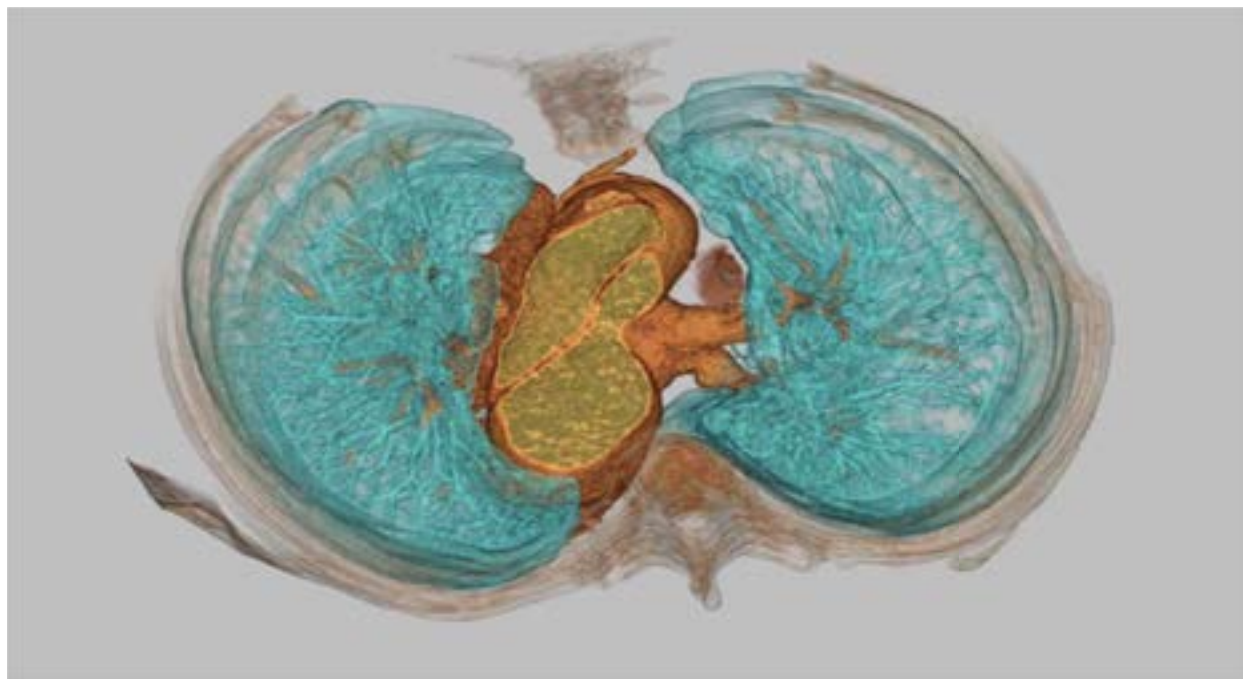


February 2014

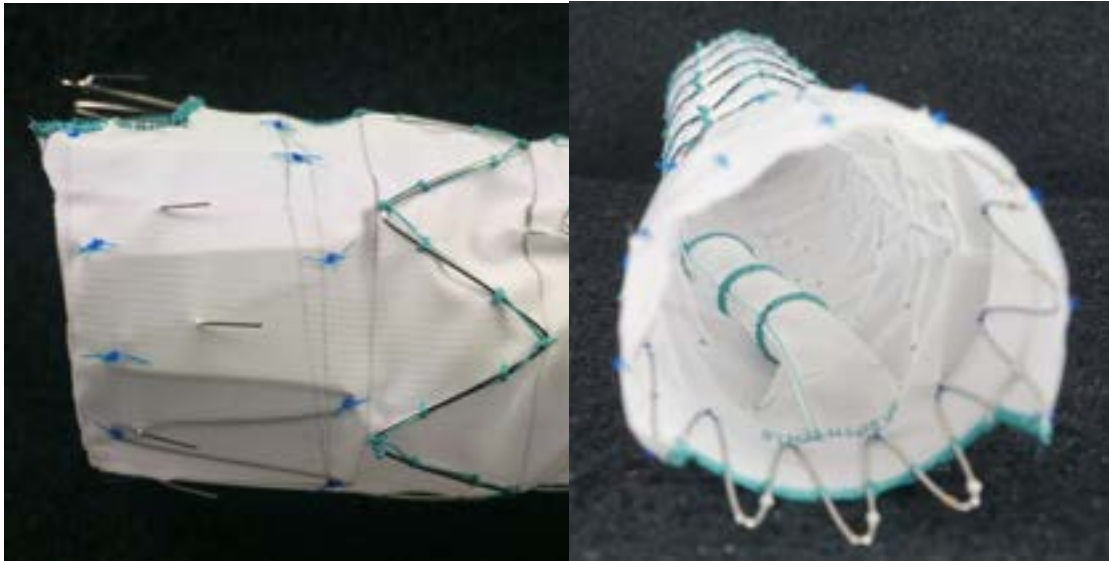
April 2015







LSA Branch Scallop Design



- Graft Design Parameters
 - 34 - 46mm - 100% of patients
 - Triple wide scallop (3cm wide) - Circumferential offset - 100%
 - Seal Length below LCA > 20mm - 90%
 - Appropriate LCA - LSA Distance - 94%
 - LSA diameter < 16mm - 94%*

Total population captured 88%

* Only an exclusion on a fully preloaded system



Single Center Analysis

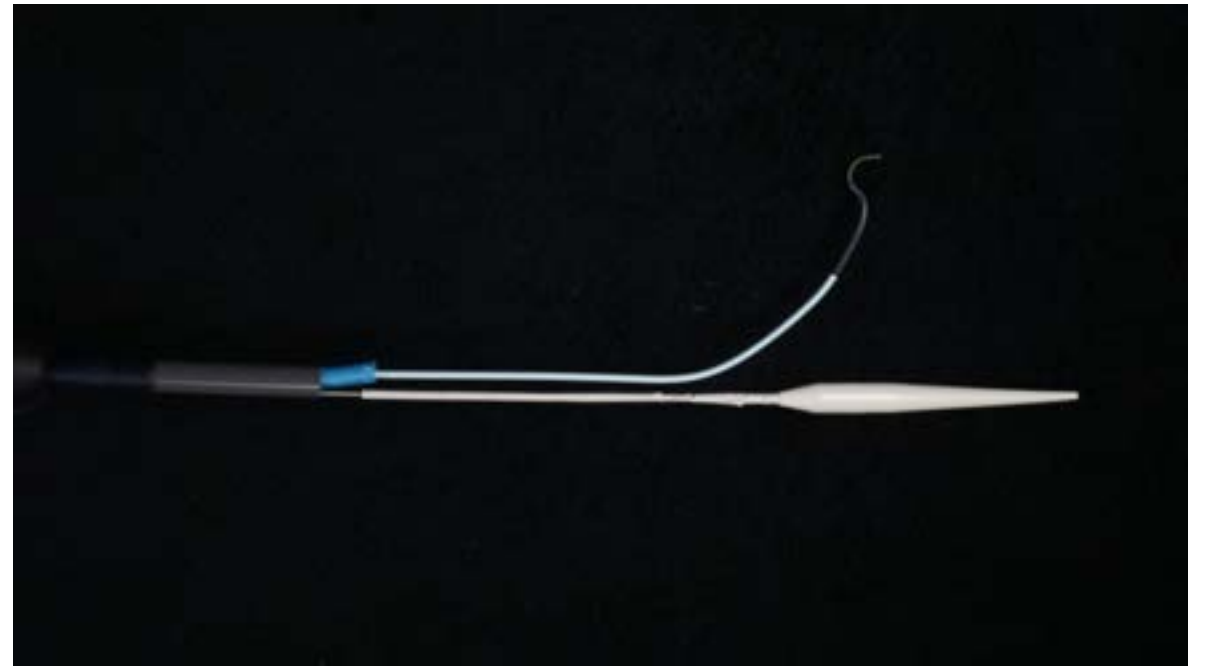
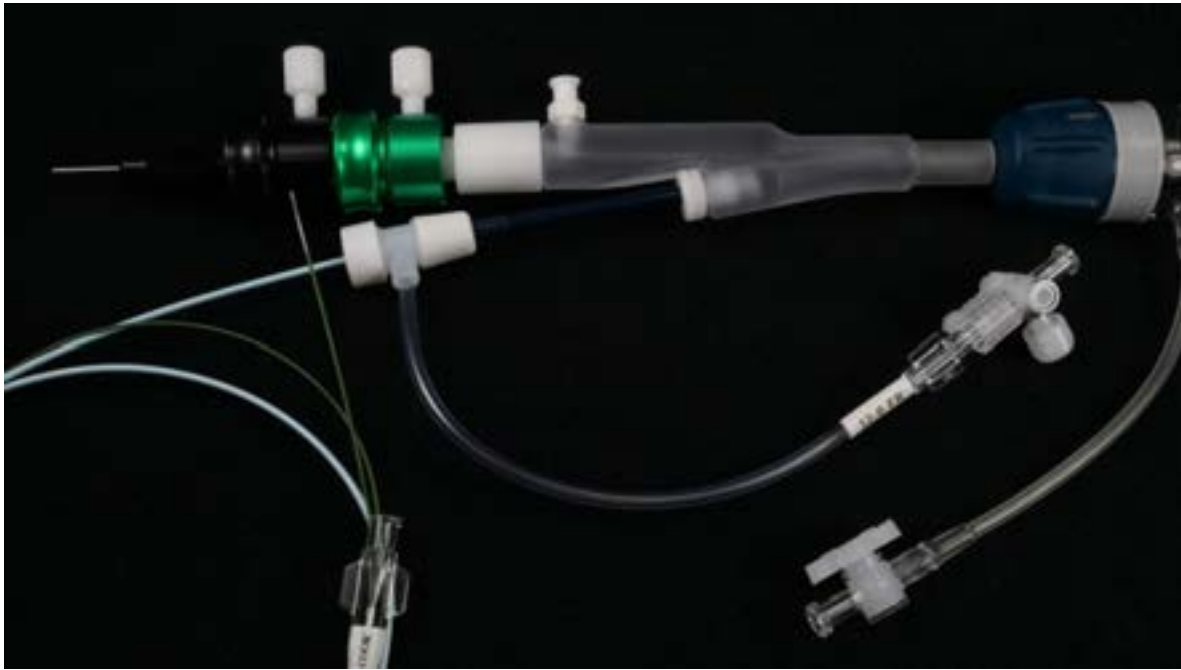
- Study period: 2011 to 2016 - 80 TEVAR w/LSA Coverage
- 65 patients (81%) could have been treated with an OTS LSA branched TEVAR configuration
- **Conclusion:**
 - low variability of LSA and LCC locations in patients with distal aortic arch disease
 - 80% applicability of a new standardised thoracic branched endograft

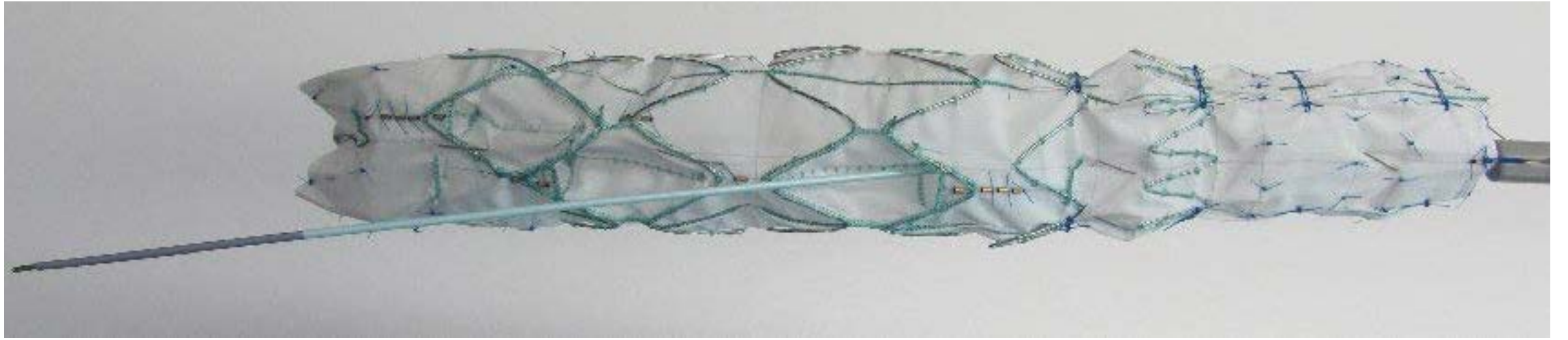


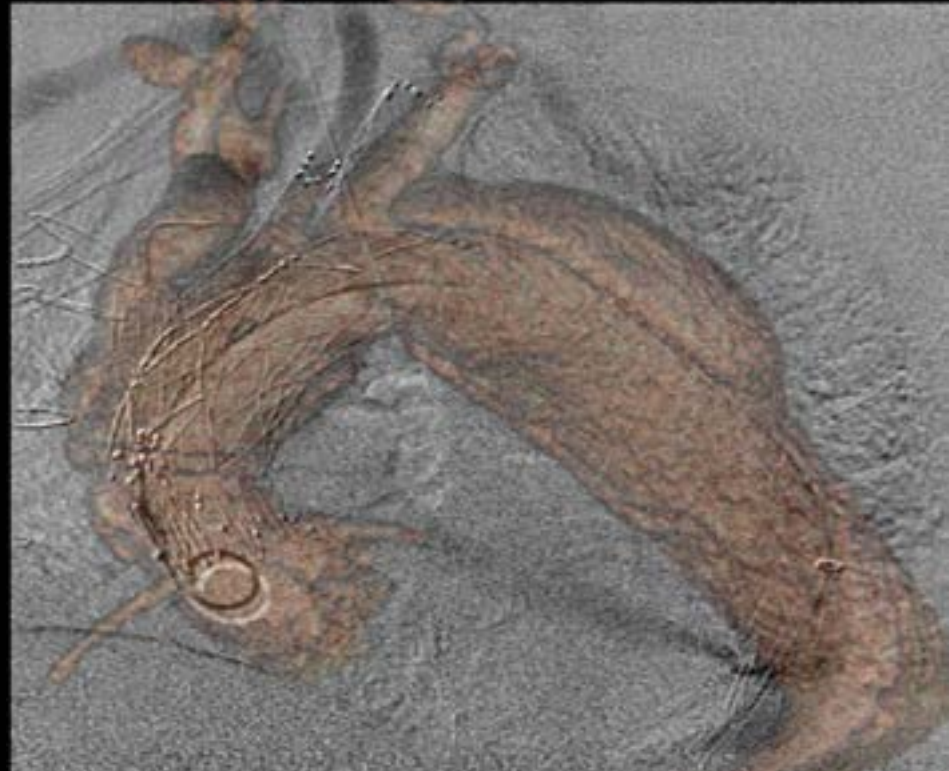
Delivery System

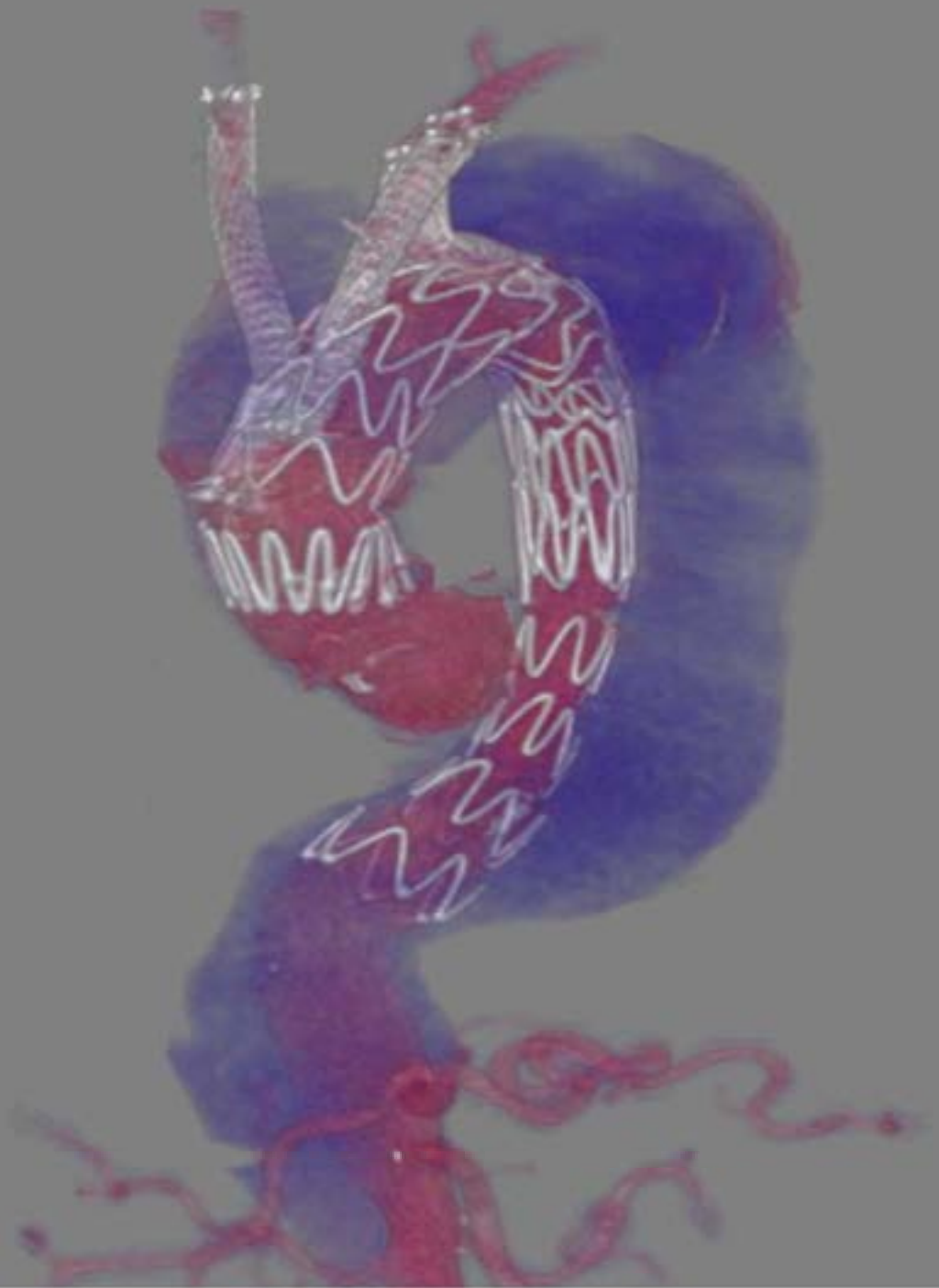


Proposed Preloaded Delivery System







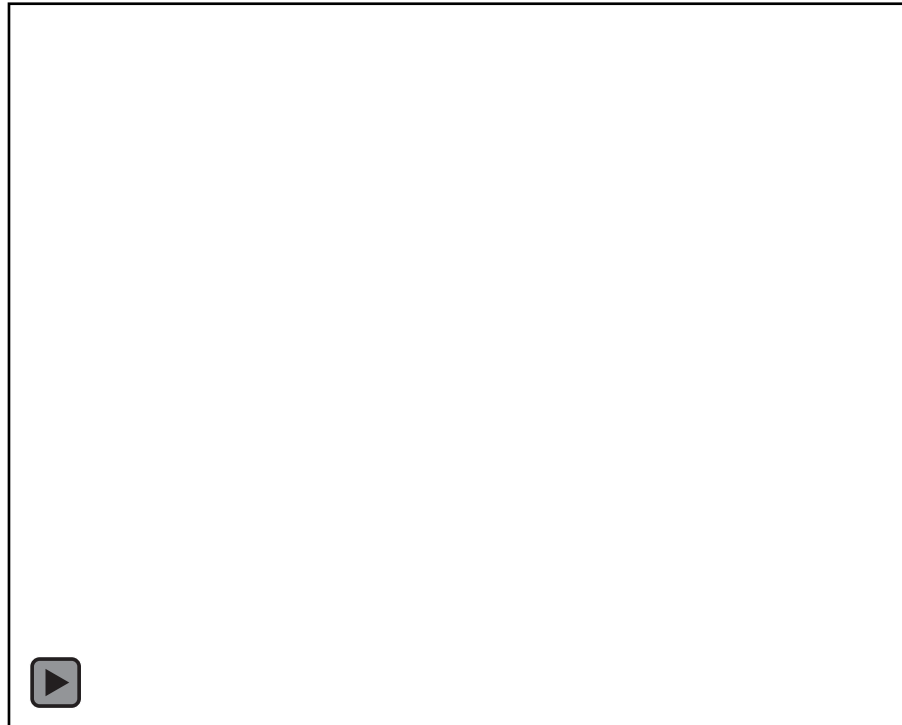


Fusion model registration

Video not available

Case example: 3 branch arch endograft

Left subclavian artery



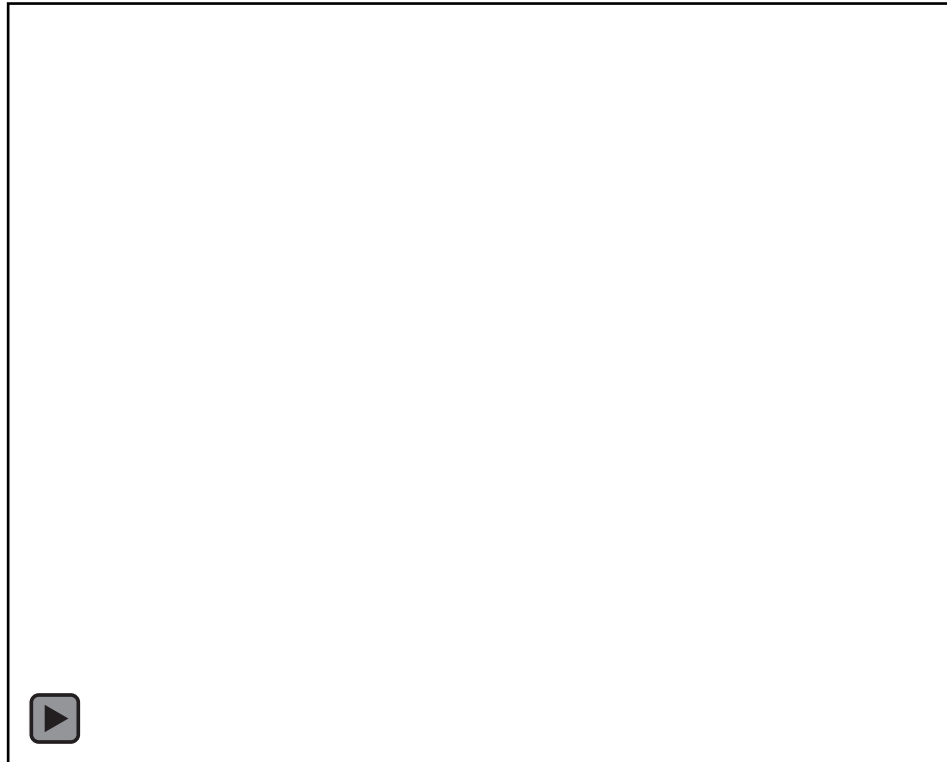
Case example: 3 branch arch endograft

Left subclavian artery and origin of vertebral



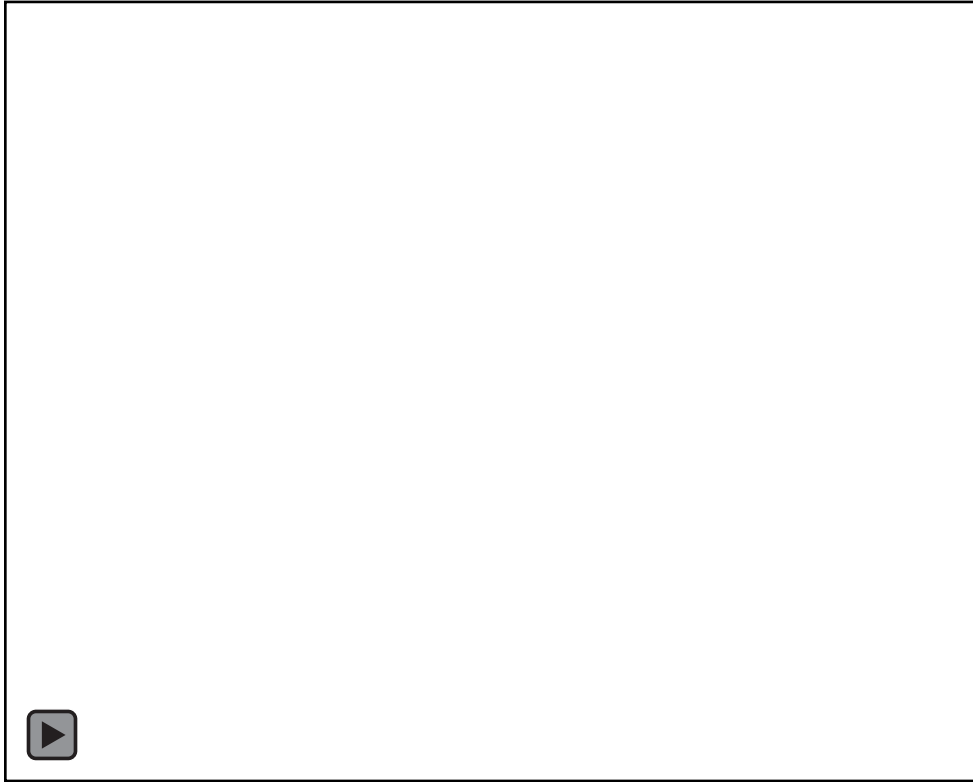
Case example: 3 branch arch endograft

Deployment Check



Case example: 3 branch arch endograft

Completion angiogram



Dissection of the SAT

Videos not available

Videos not available

Perspectives?



CONCLUSIONS



- Off the Shelf Endografts for Arch Aneurysms
- 3-branch design
- Chronic dissections with prior ascending repair
- High volume centers performing both open and endovascular repairs