Welcome to the 7th
European Bifurcation Club
14-15 October 2011 - LISBON

The essence of the EBC 2011 OCT session

European Bifurcation Club

EBC

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UZ Leuven, Belgium

Disclosure:

consultant for St Jude Medical

Research grant from Abbott Vascular

European Bifurcation Club

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Key points of OCT at EBC 2011

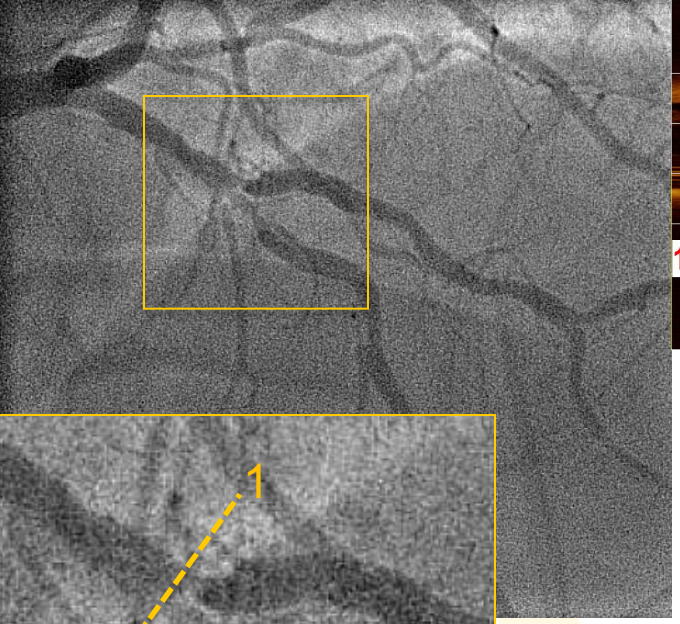
I. OCT core lab methodology

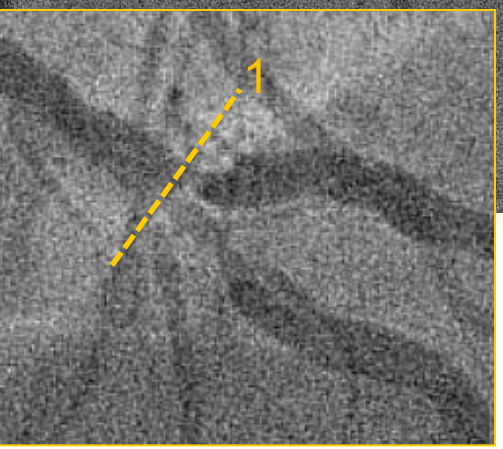
II. Evaluation of the success of bifurcation PCI

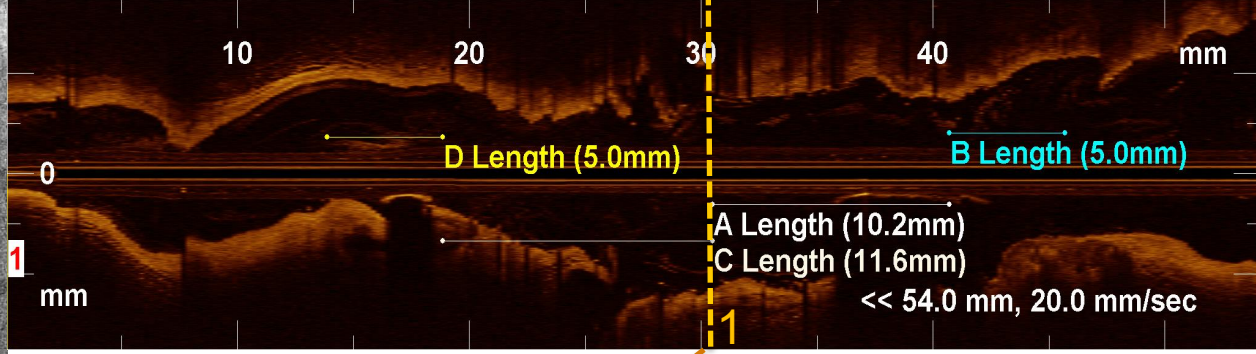
   A. Individual patient: guidance/optimization of PCI

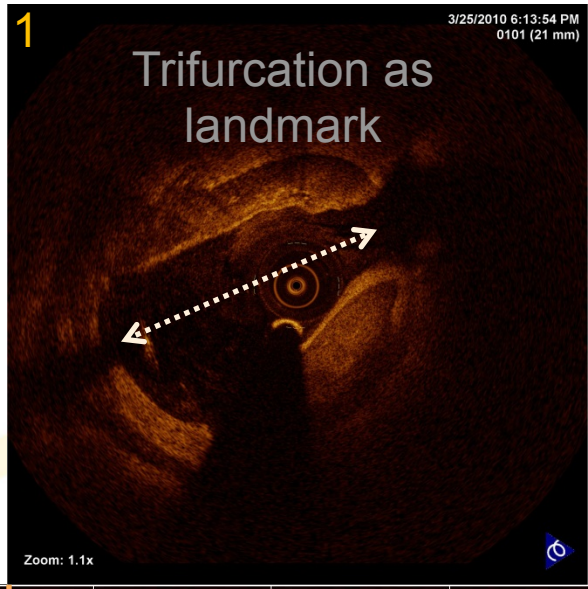
   B. Device/technique/lesion subset level

OCT Core Lab methodology



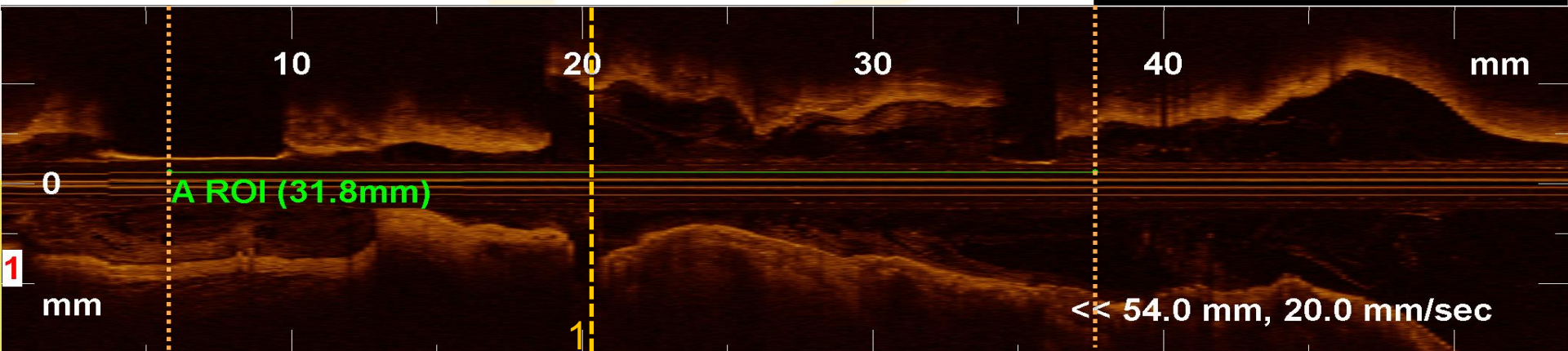






A: Stent length proximal to landmark
C: Stent length distal to landmark
B and **D**: 5 mm edges.

A+B+C+D = ROI = 31.8 mm



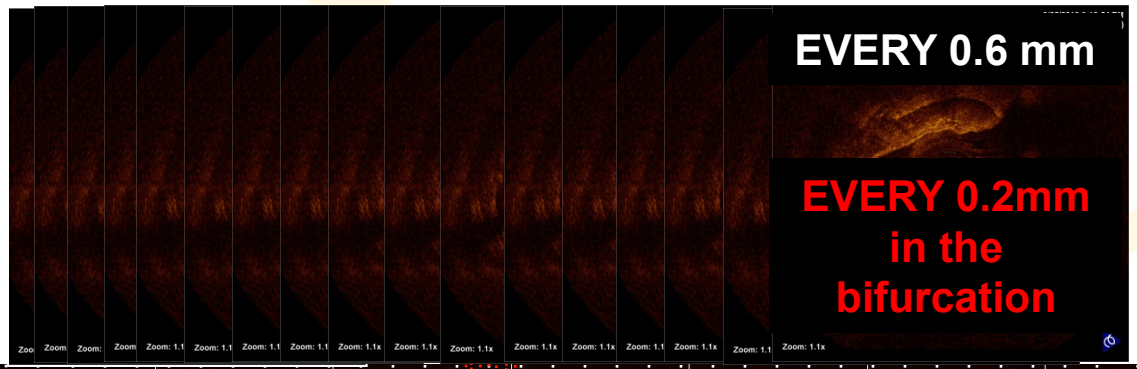
QUALITATIVE ASSESSMENT

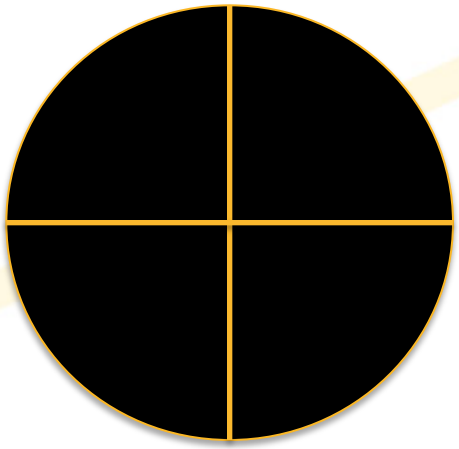
1- Plaque type (“semi-quantitative”)

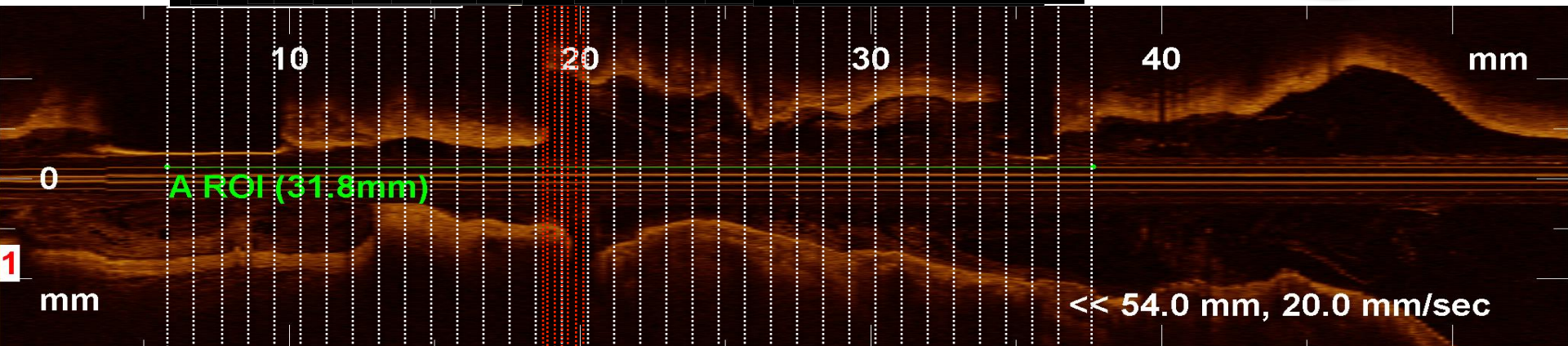
- Divide the cross-section in 4 quadrants.

-Label as **<u>lipidic, calcified, fibrotic or normal</u>**.

-The predominant component will be determined by **quantification**.

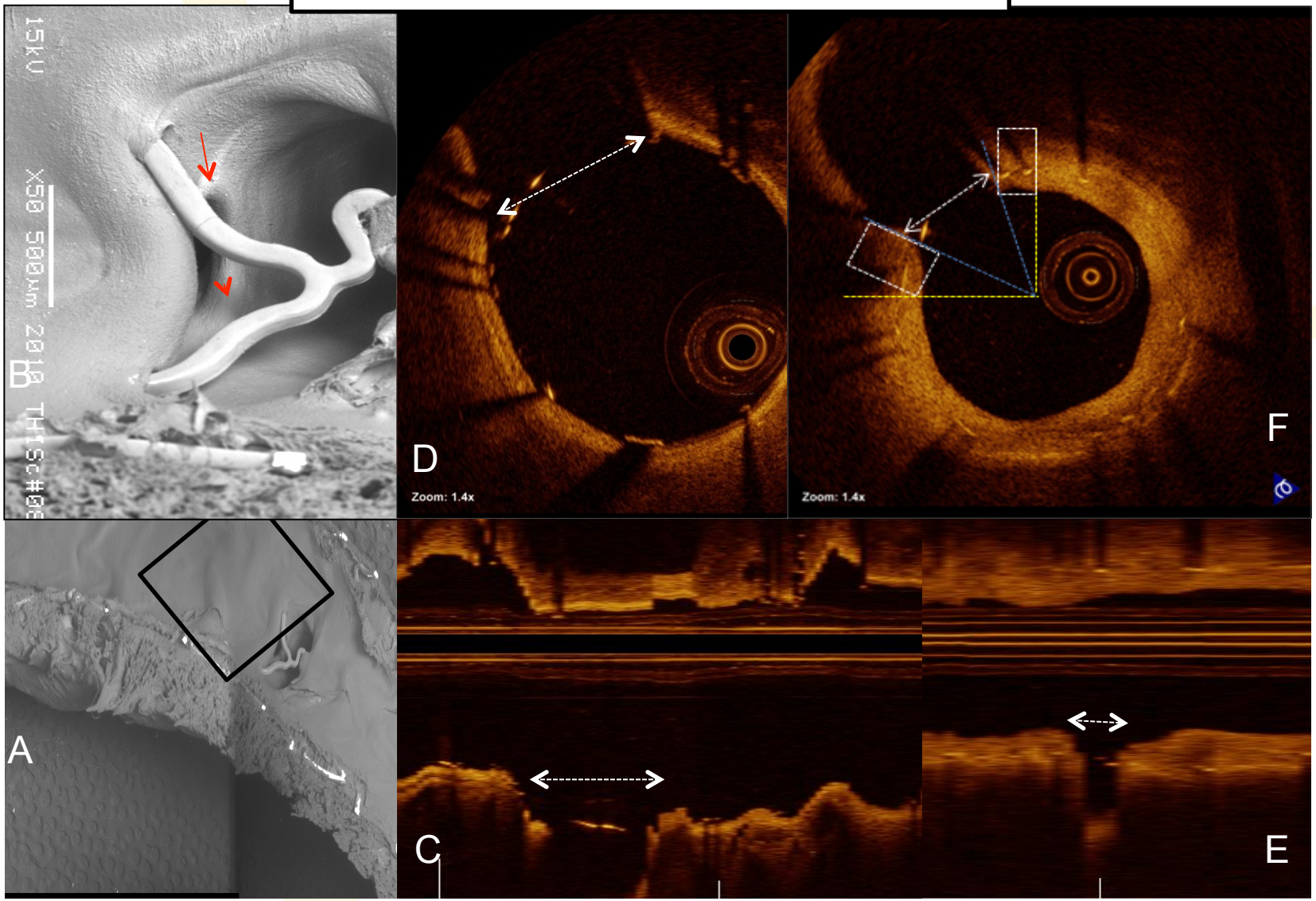






Serial Imaging is critical

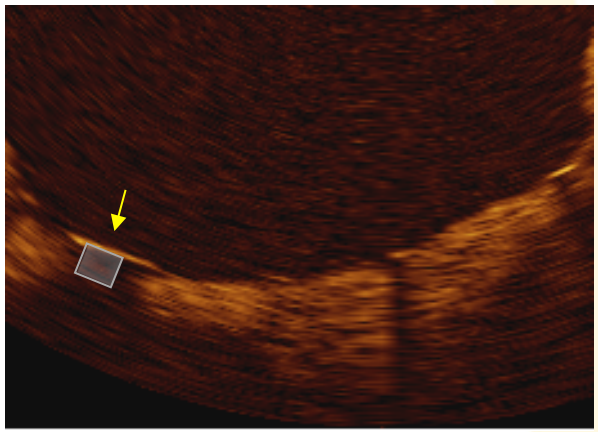
Pre Clinical Assessment of Bifurcation DES



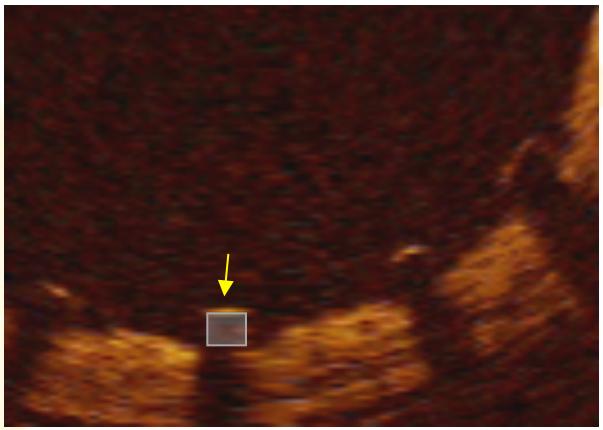
Perin, Bezerra, Costa unpublished

Classification of Stent Strut Malapposition

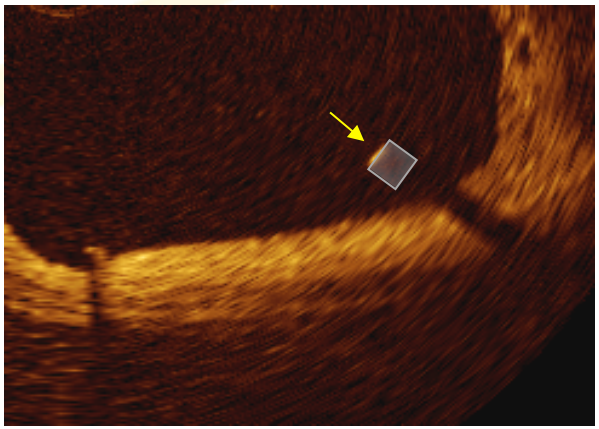
	Apposed		Malapposed
	Embedded	Protruding	Malapposed
Cypher Select	< 80μm	80 - 160μm	≥ 160μm
Taxus Liberte	< 65μm	65 - 130μm	≥ 130μm
Endeavor/Resolute	< 55μm	55 - 110μm	≥ 110μm
Xience/Promus	< 50μm	50 – 100μm	≥ 100μm



Embedded

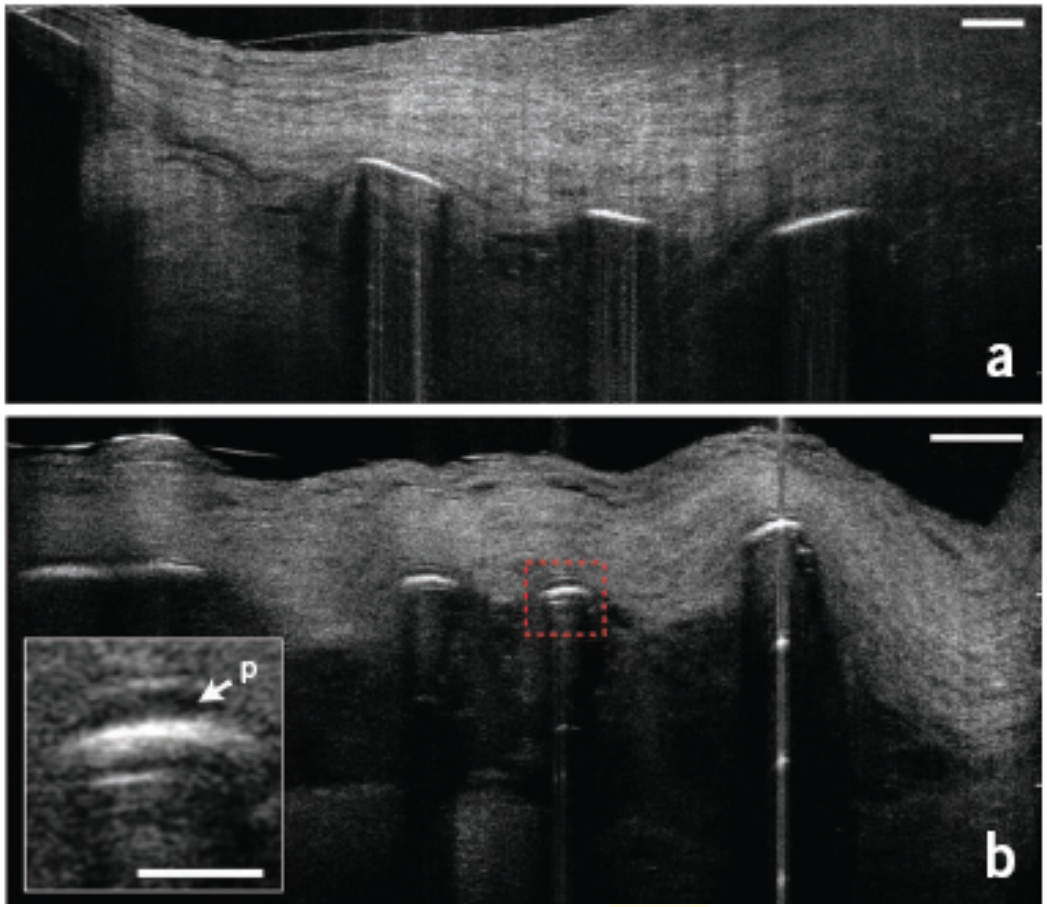


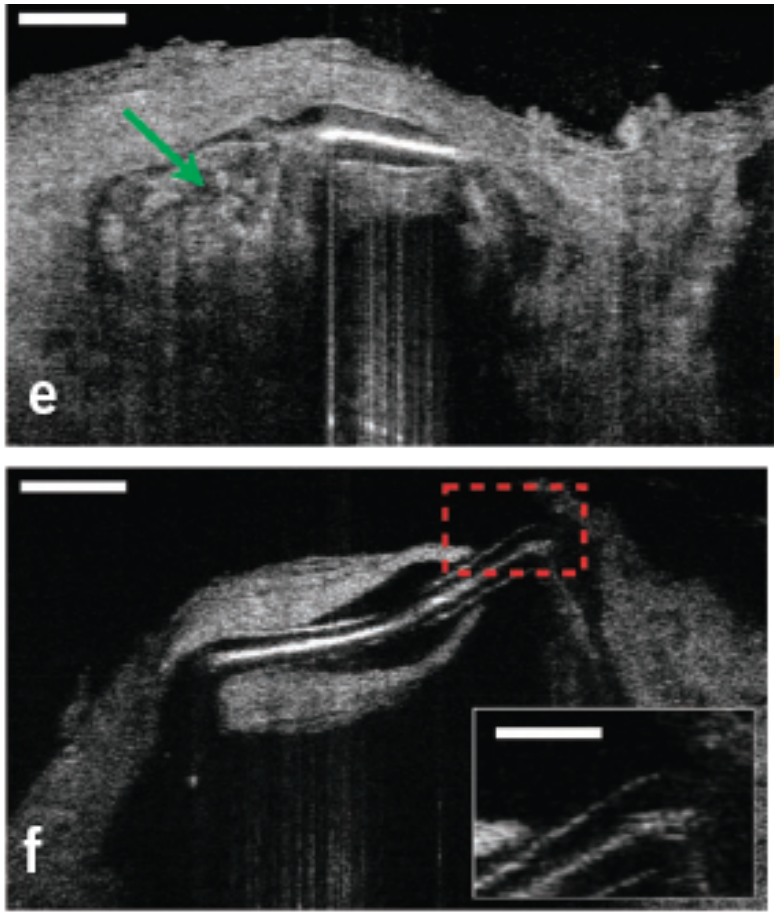
Protruding



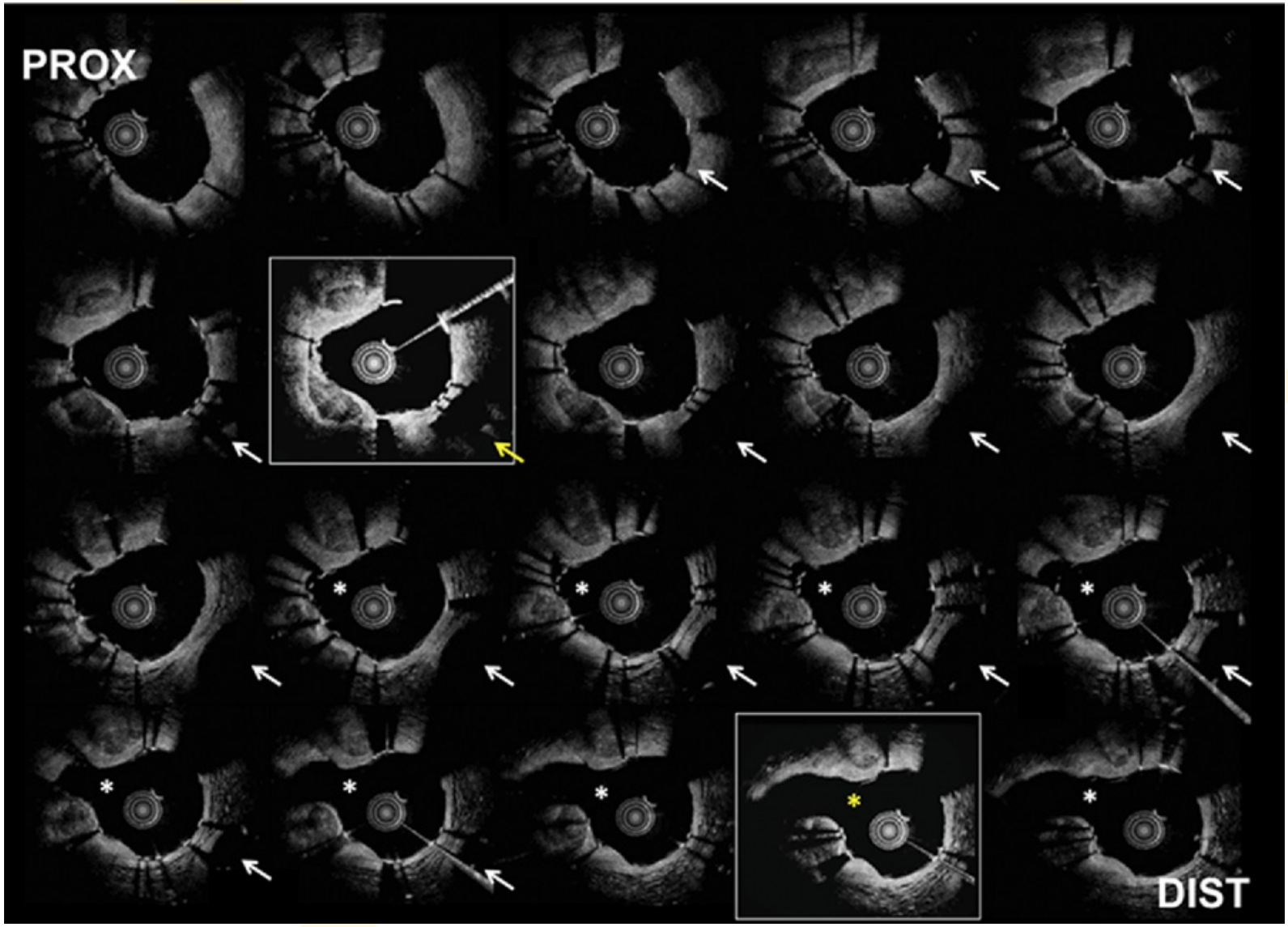
Malapposed

Micro OCT

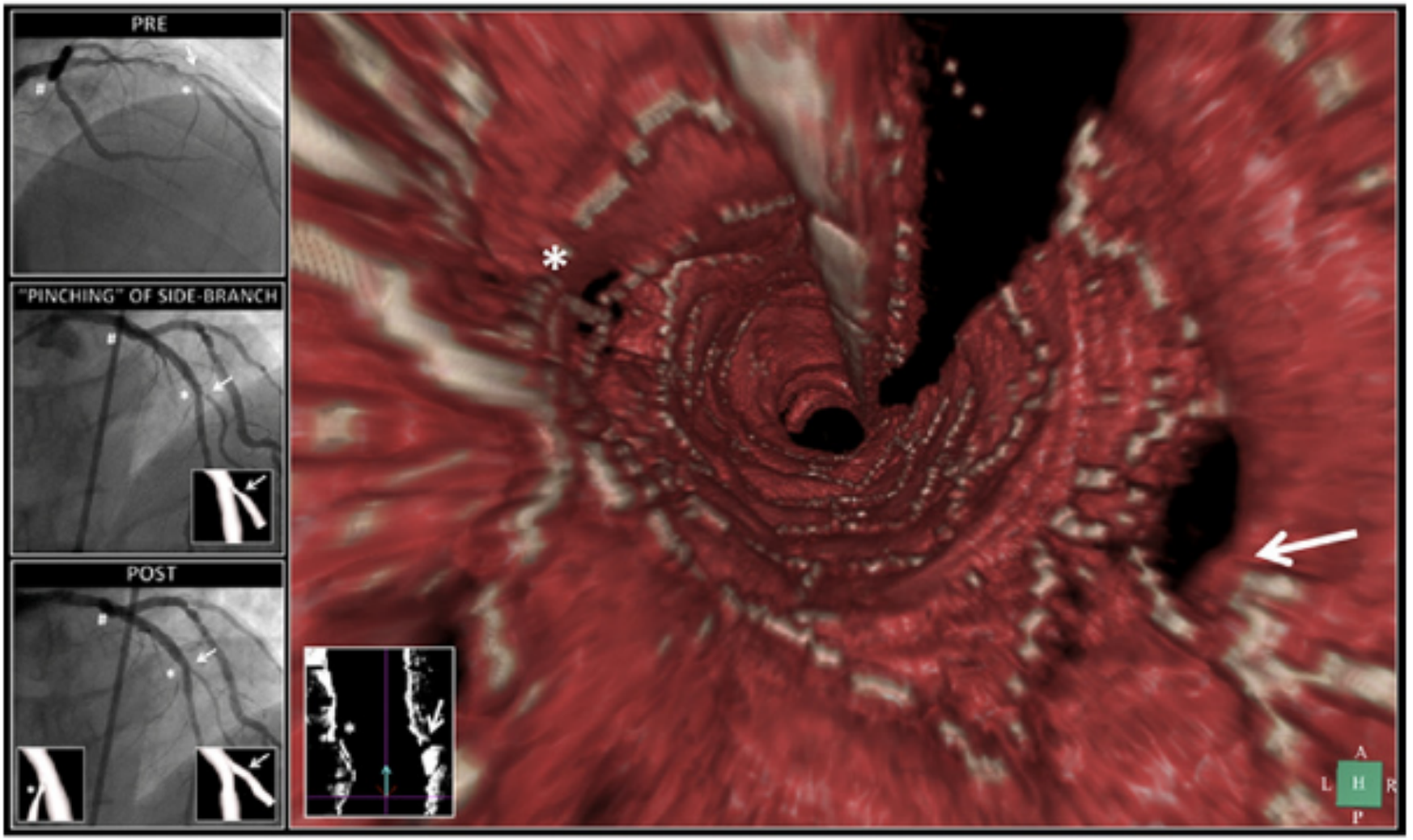




Liu et al. Nat Med 2011; 17: 1010-4.



Farooq et al. JACC Img 2011



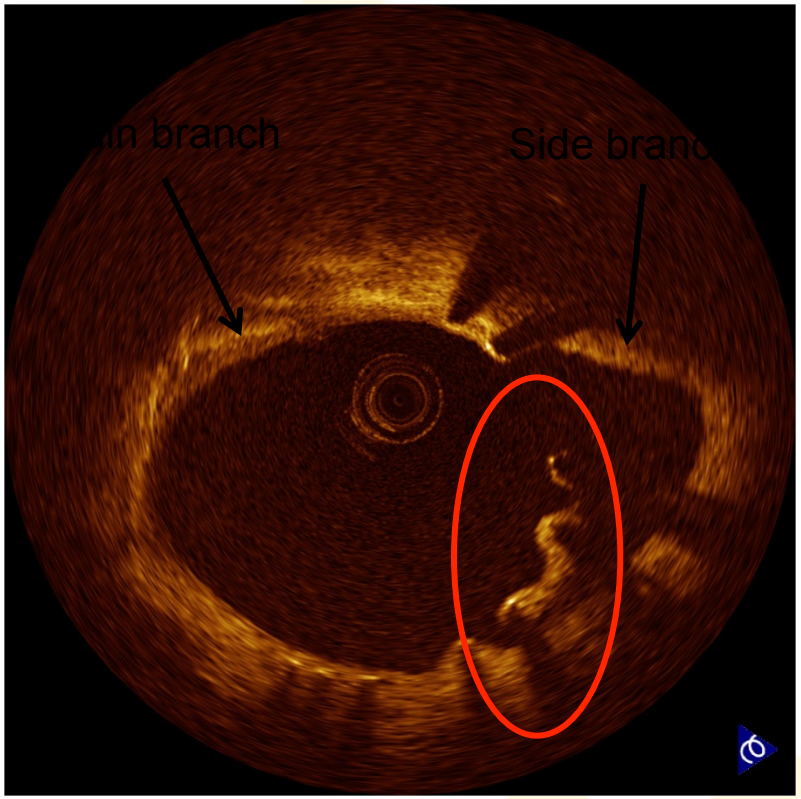
Farooq et al. JACC Img 2011

II. Evaluation of bifurcation PCI

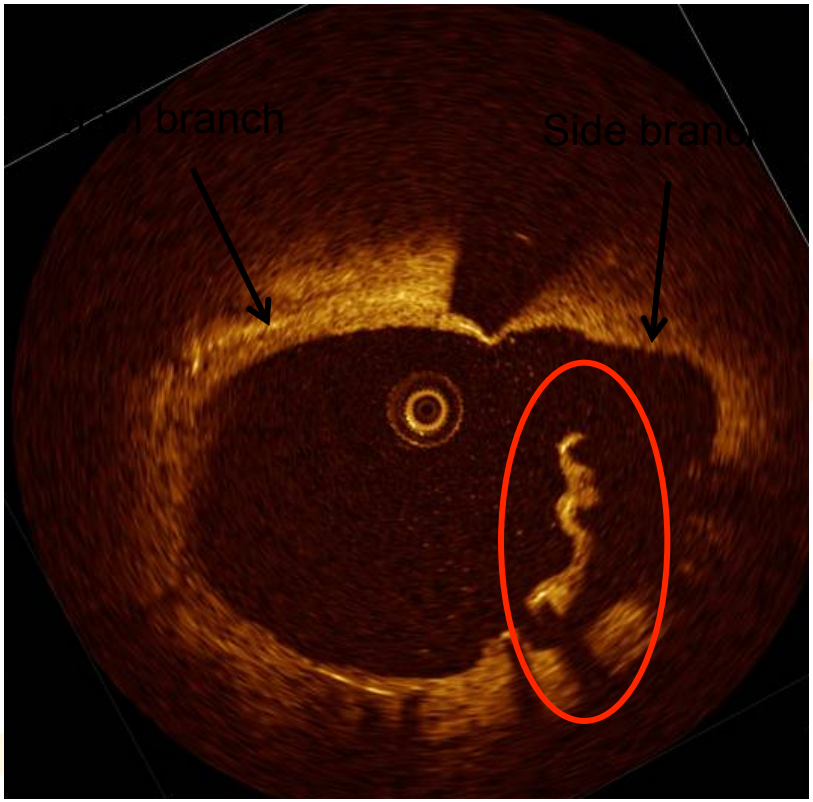
A. Device/technique/lesion subset level

Representative cases

Serial changes of neointimal thickness and coverage

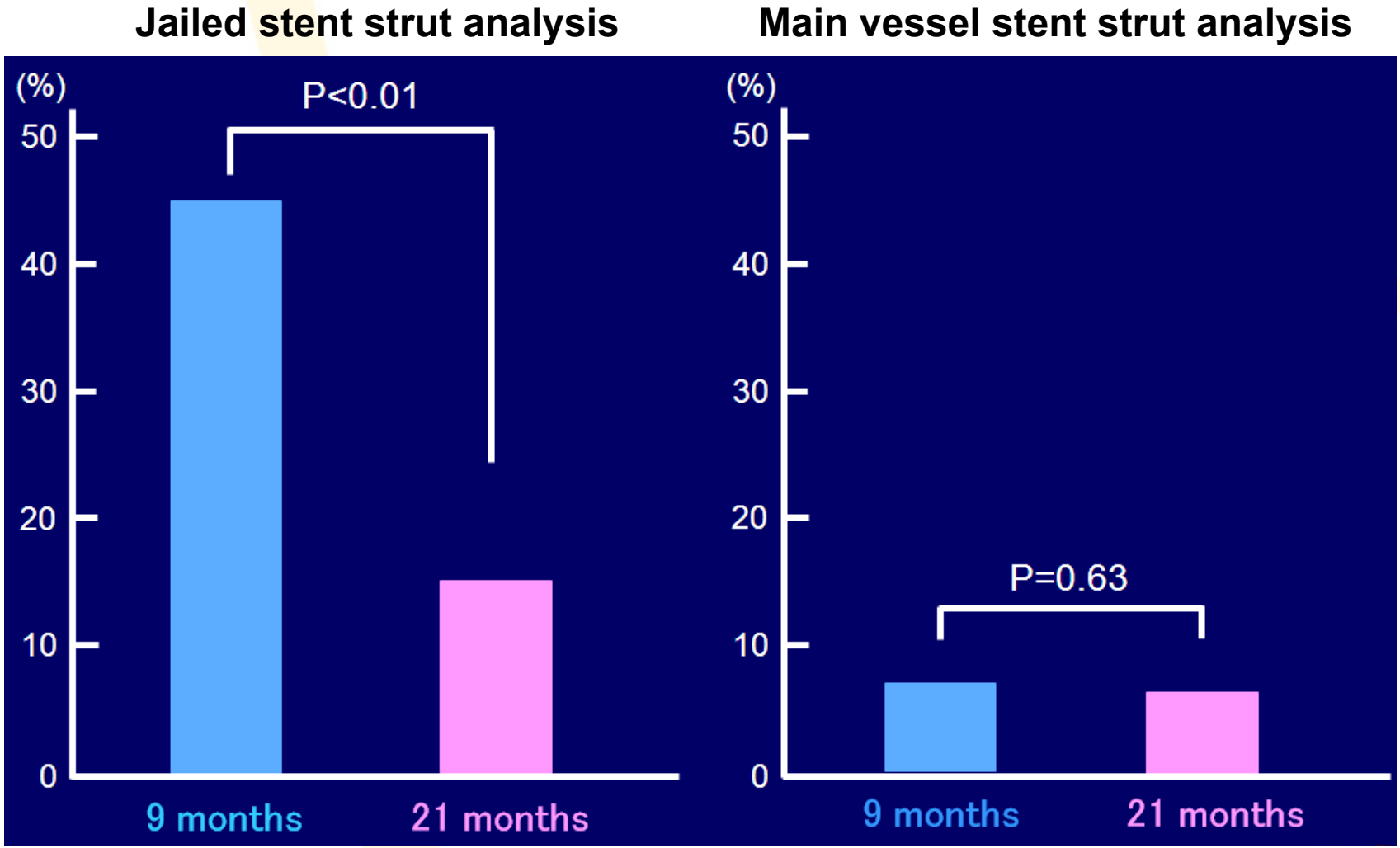


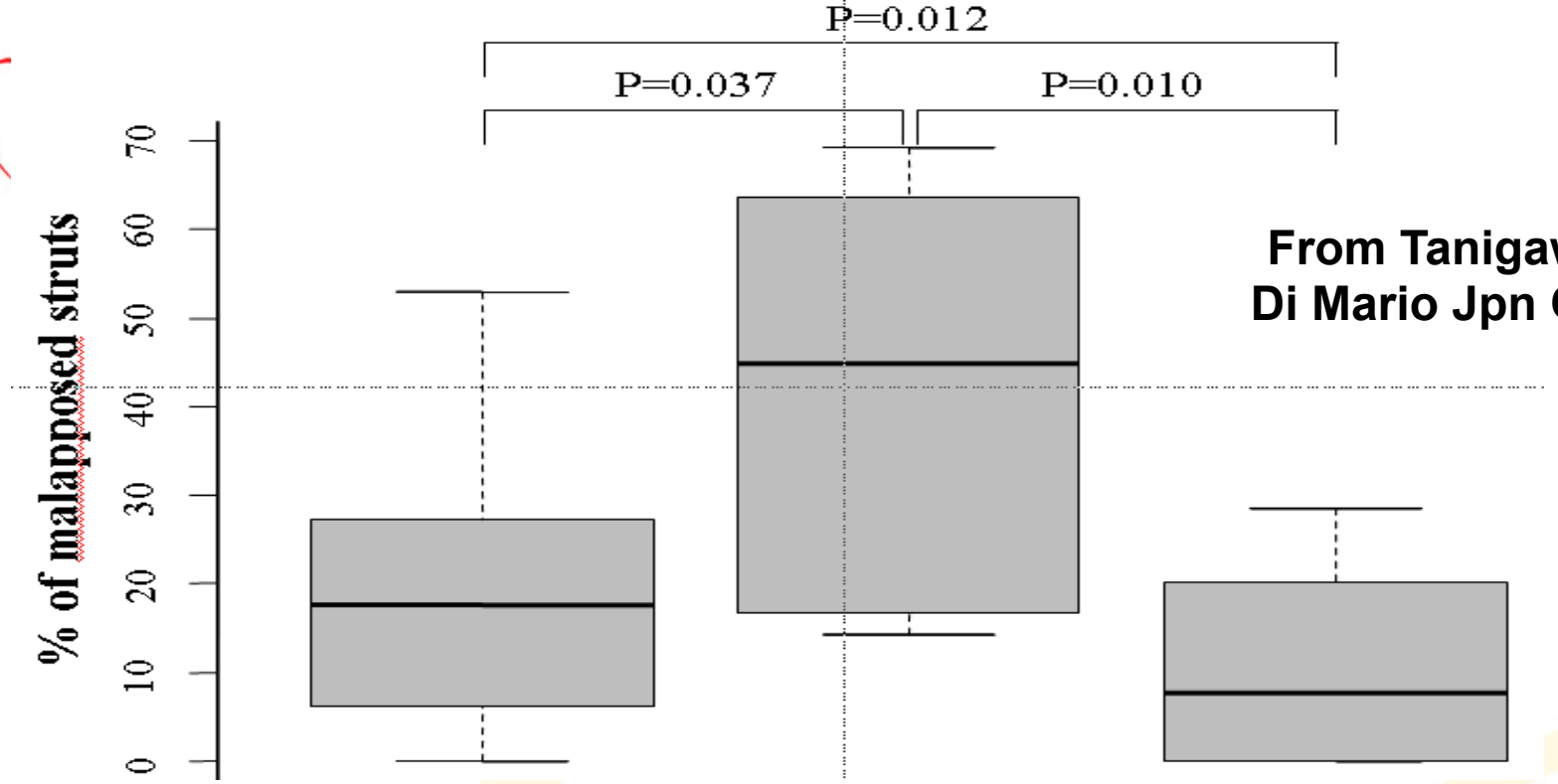
9 months later



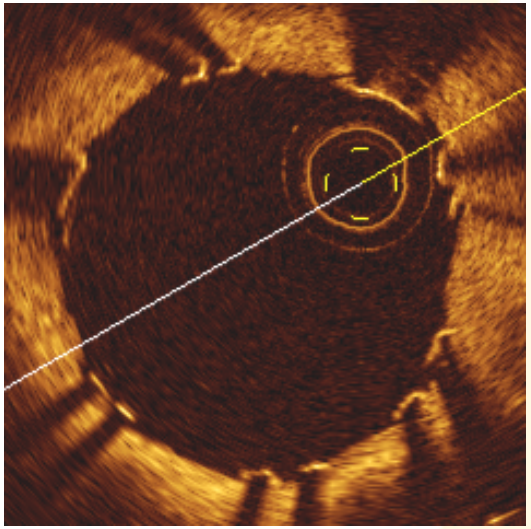
20 months later

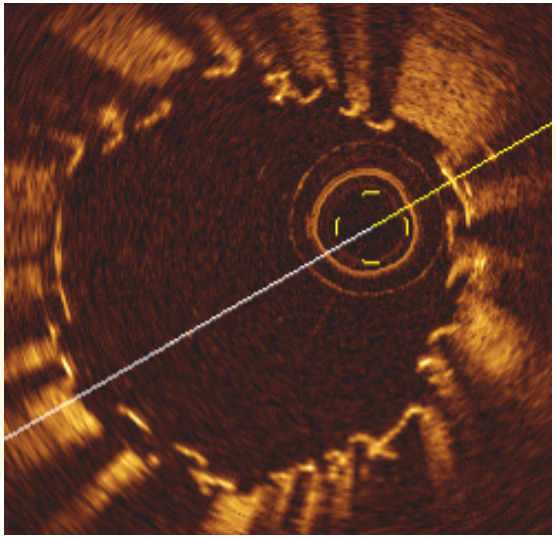
Percentage of uncovered stent strut

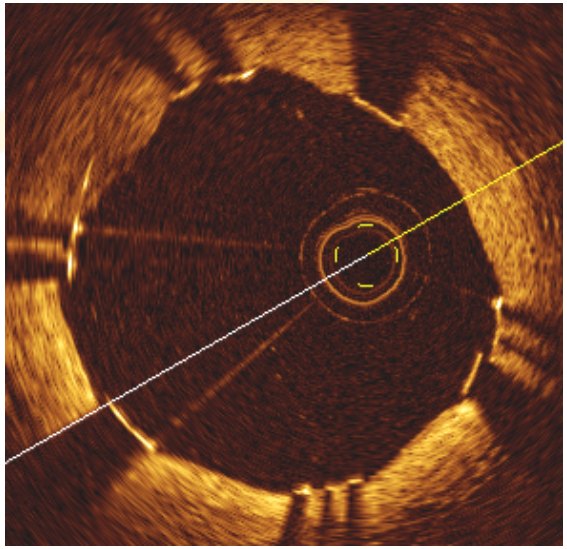




From Tanigawa, Barlis, Di Mario Jpn Circ J 2008

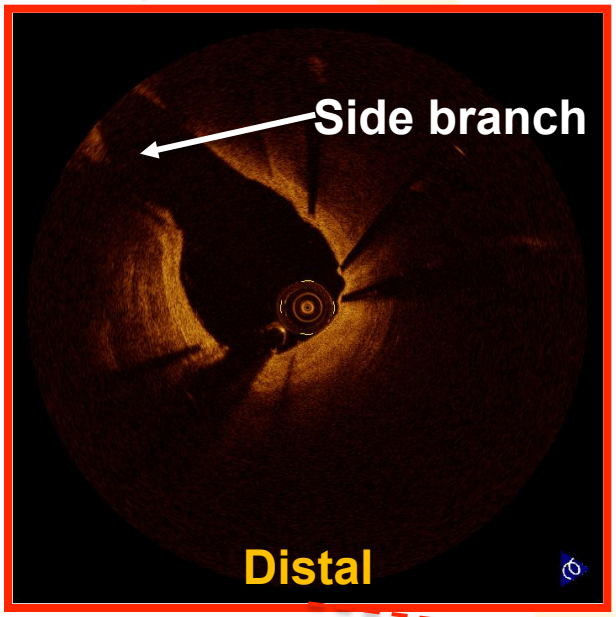


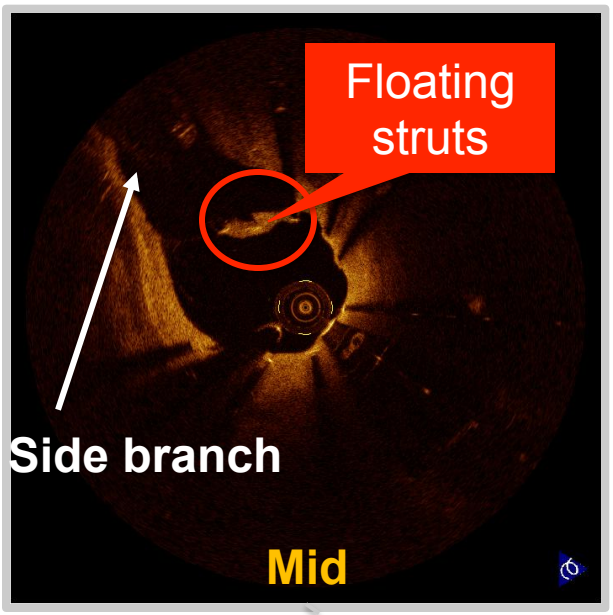


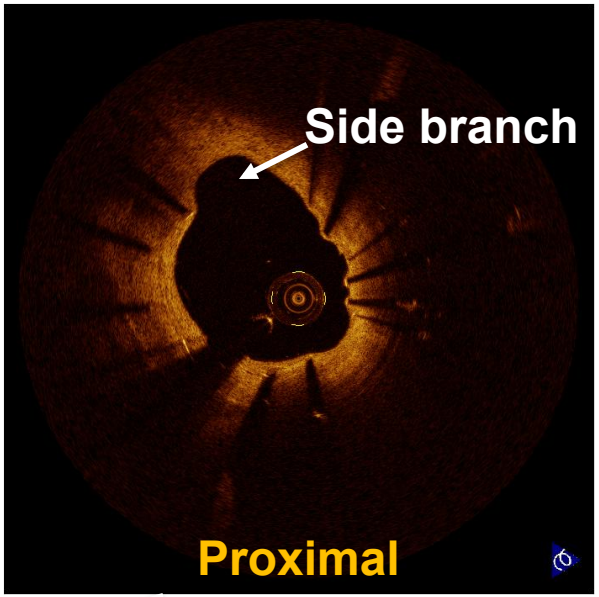


Proximal **Overlapping** **Distal**

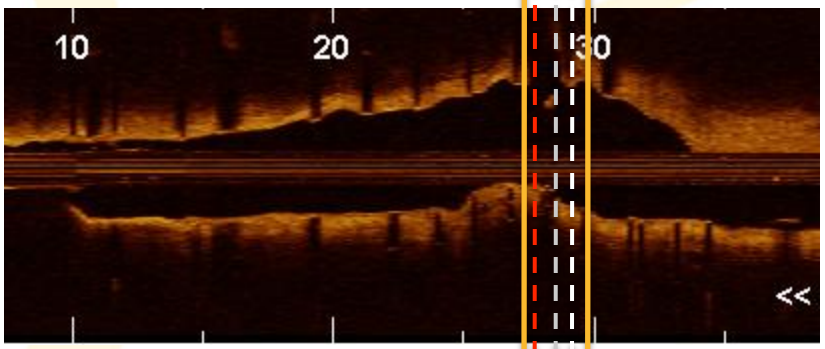
Positioning of Tryton stent







MB Distal

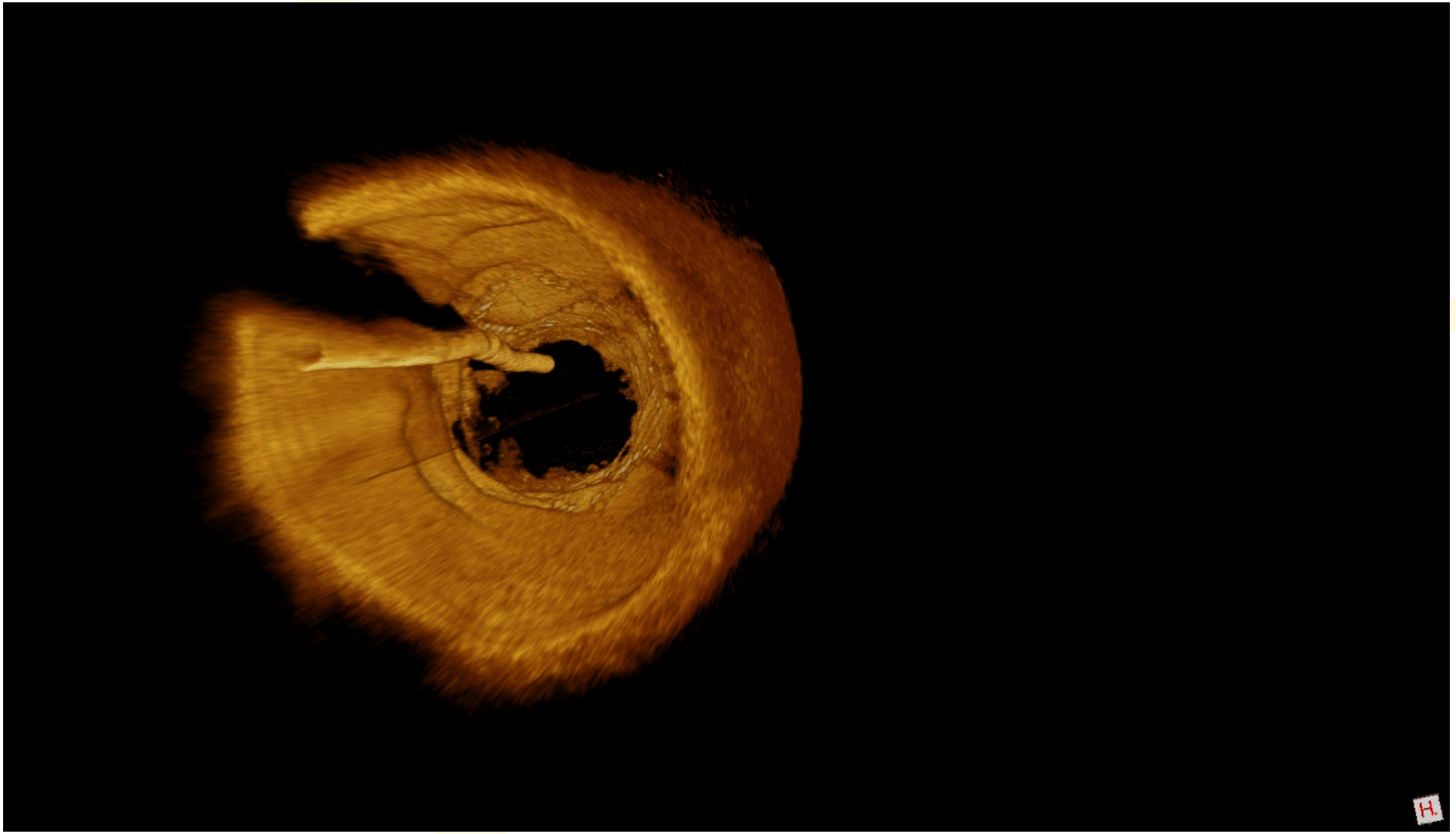


MB Proximal

II. Evaluation of bifurcation PCI

B. Individ. patient: guidance/optimization of PCI

3D OCT: Overhanging struts



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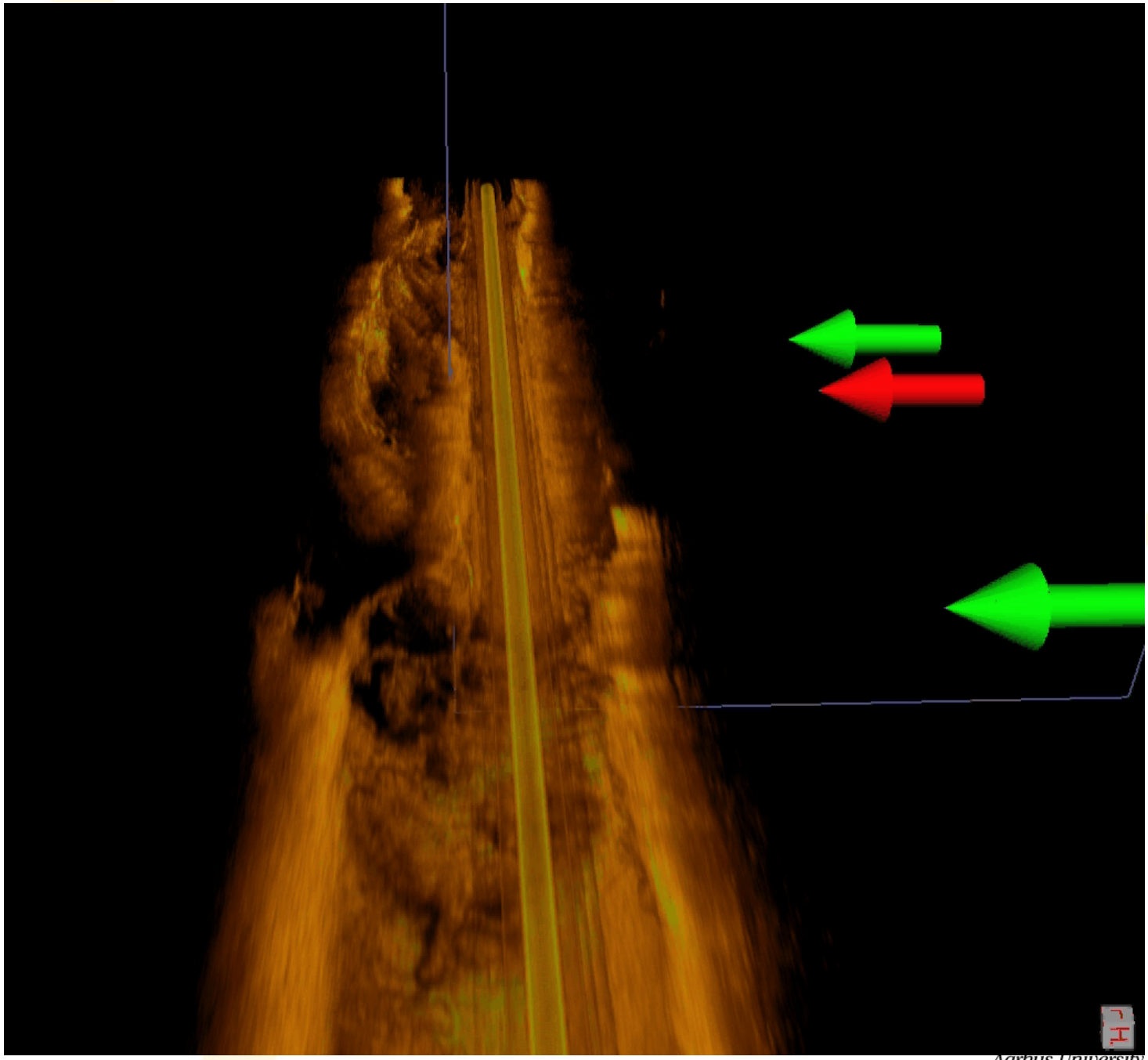

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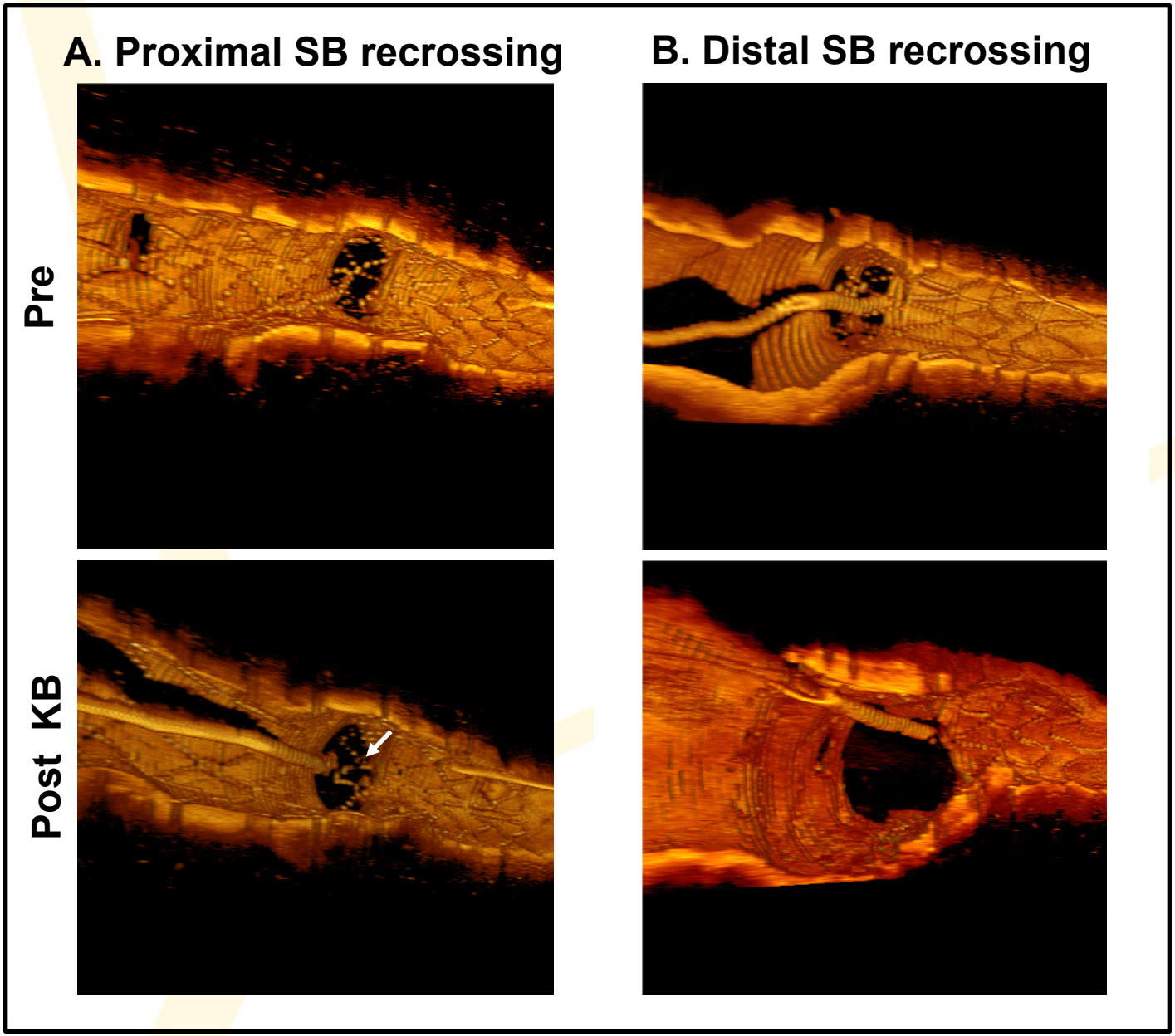
SKEJBY

Proximal versus Distal Recrossing



Towards a ***concentrated effort*** of **EBC** members in ***OCT*** methodology, reporting and conducation of studies?

Proposal for EBC OCT in bifurcation working group document