

Statement of Financial Interest

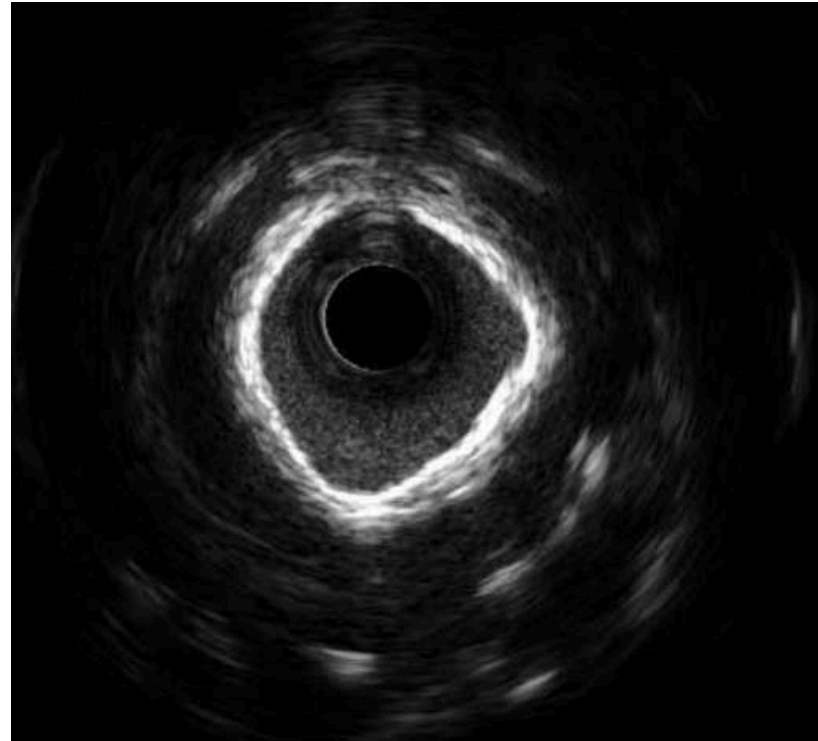
Speaker's name: Thomas Cuisset, MD, PhD

X I have the following potential conflicts of interest to report:

x Consulting and lecture fees: Abbott Vascular, Astra Zeneca, Boston Scientific, Edwards, Europa Organisation, Medtronic, Terumo, Sanofi

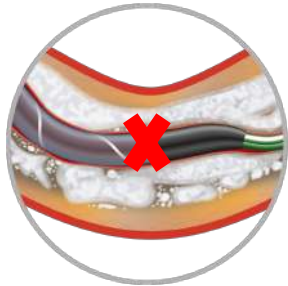
- Employment in industry
- Stockholder of a healthcare company
- Owner of a healthcare company

Algorithm for calcified lesions

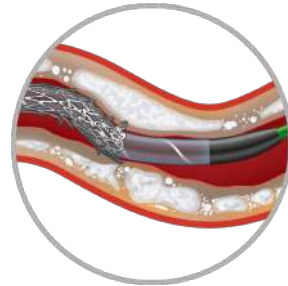


Thomas CUISSET, CHU Timone, Marseille

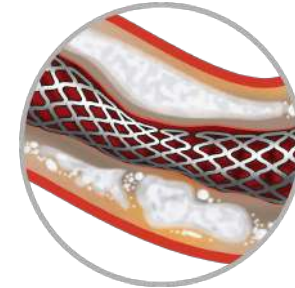
Risks of calcified lesions



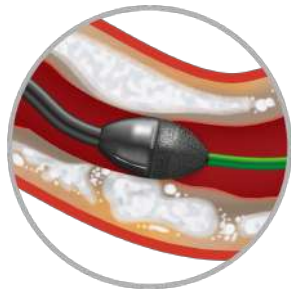
Failure of delivery



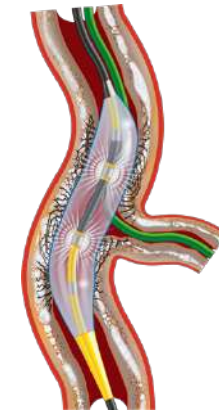
Stent/polymer Damage



Sub-optimal stent deployment



Need for specific devices !



Calcified lesion: How ?

	Rotablator	Orbital	IVL
Lésions calcifiées	+++	+++	+++
Lésions infranchissables	+++	+/-	-
Tortuosités	+/-	+++	+/-
Intrastent	+/-	+/-	+++
Lésions longues	++	+++	-
Calcifications superficielles	+++	++	+/-
Calcifications profondes	+	++	+++

PCI of heavily calcified Lesion: THM

No direct stenting

Consider dedicated devices

Assess stent expansion (IC Imaging, angiography, stent boost)

Optimisation / NC balloon after stent implantation

Imaging and calcified Lesion: THM (1)

IC imaging is useful to treat calcified lesion, not mandatory

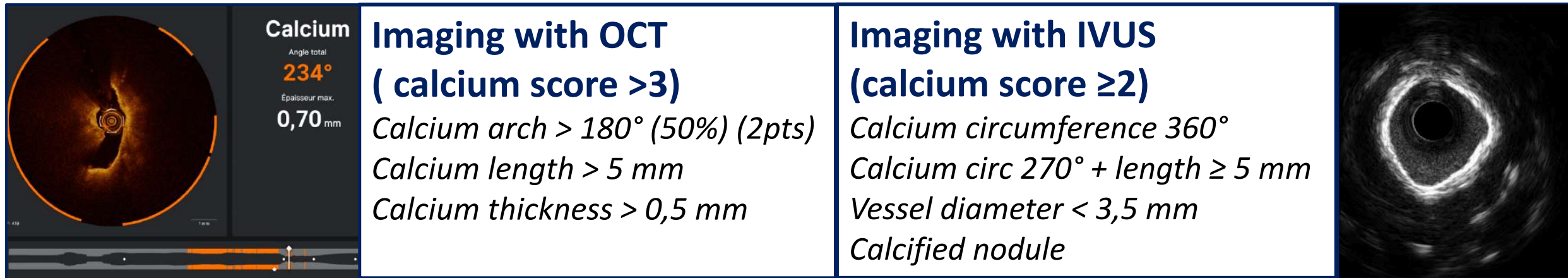
If no IC imaging, angiographic assessment +/- CT Scan for
Calcification analysis

Stent expansion using enhancement of stent structure (stent boost)

IC imaging probe should be able to cross the lesion to do imaging !

IC Imaging and calcified Lesion: THM (2)

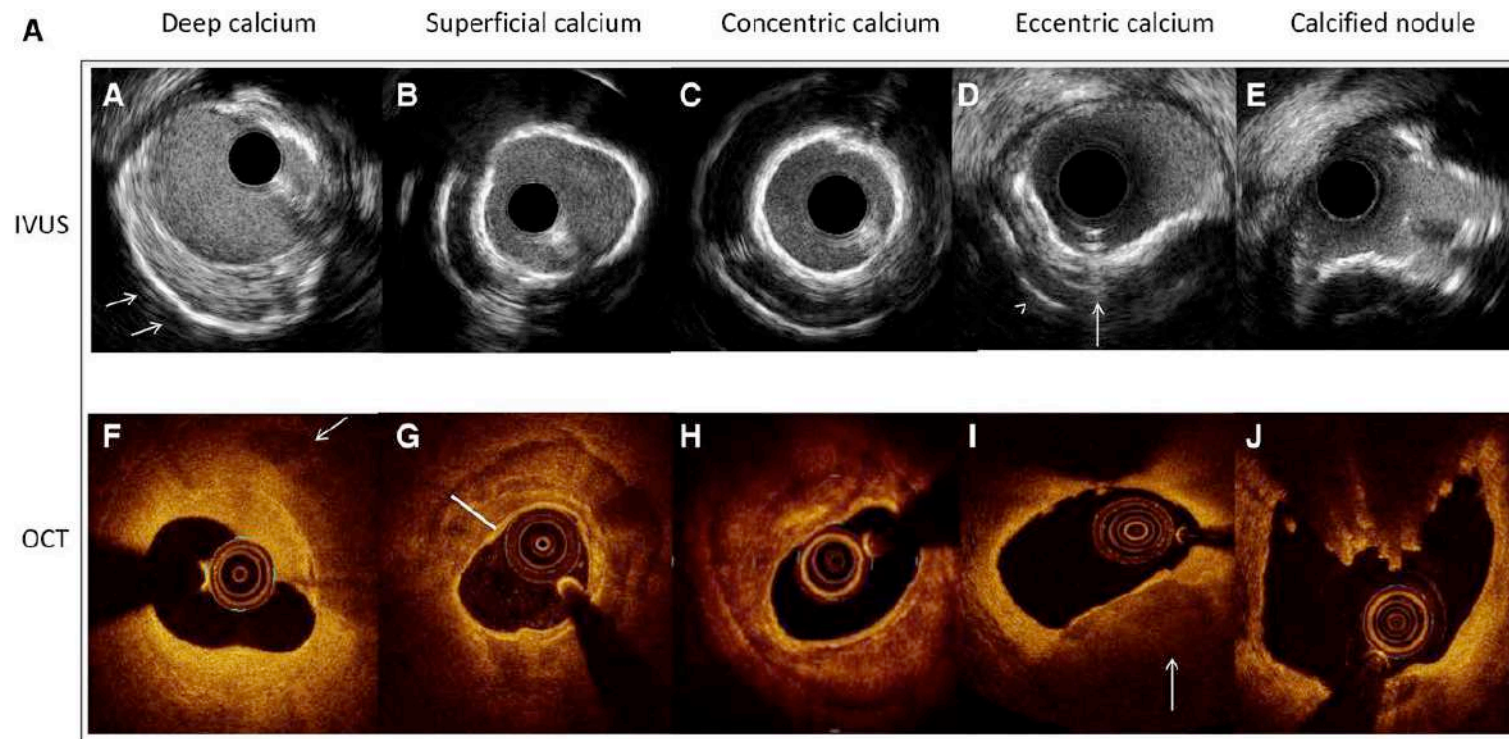
First information: severity of calcification requiring specific devices ?



If YES: Consider dedicated device for calcified lesion

IC Imaging and calcified Lesion: THM (2)

Second information: type of calcification to select appropriate device?

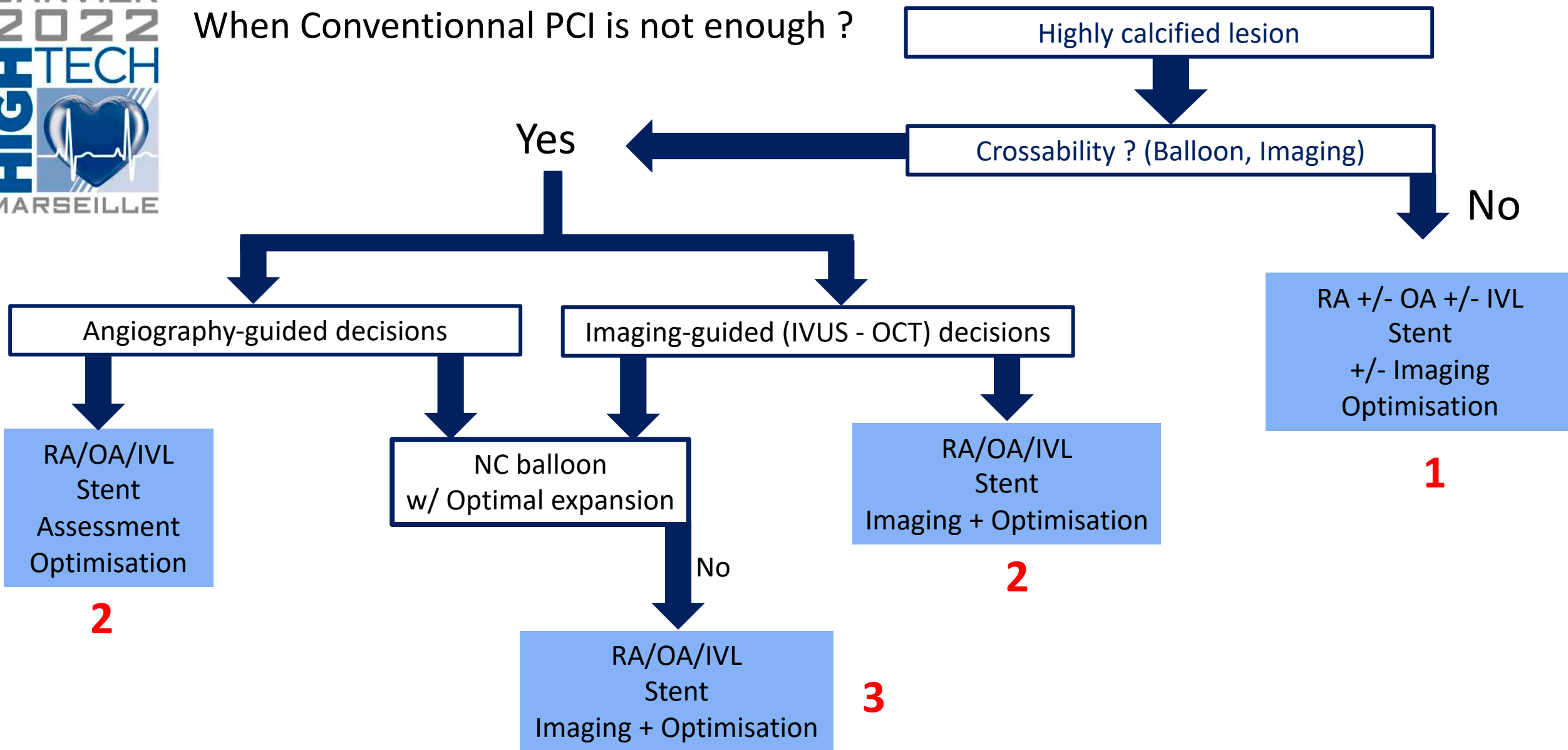


Algorithm 1

When « Conventiounnal PCI » is not enough ?

Algorithm 1

When Conventional PCI is not enough ?



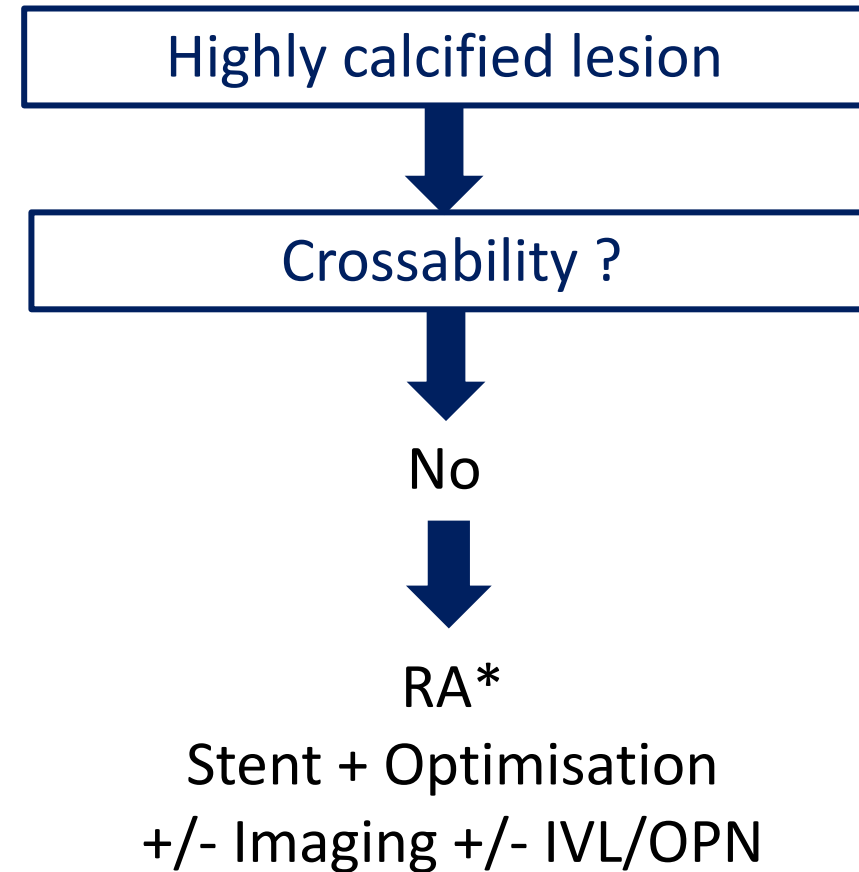
Algorithm 2

Which technique is appropriate ?

Algorithm 2a

Uncrossable lesion

Which technique is appropriate ?

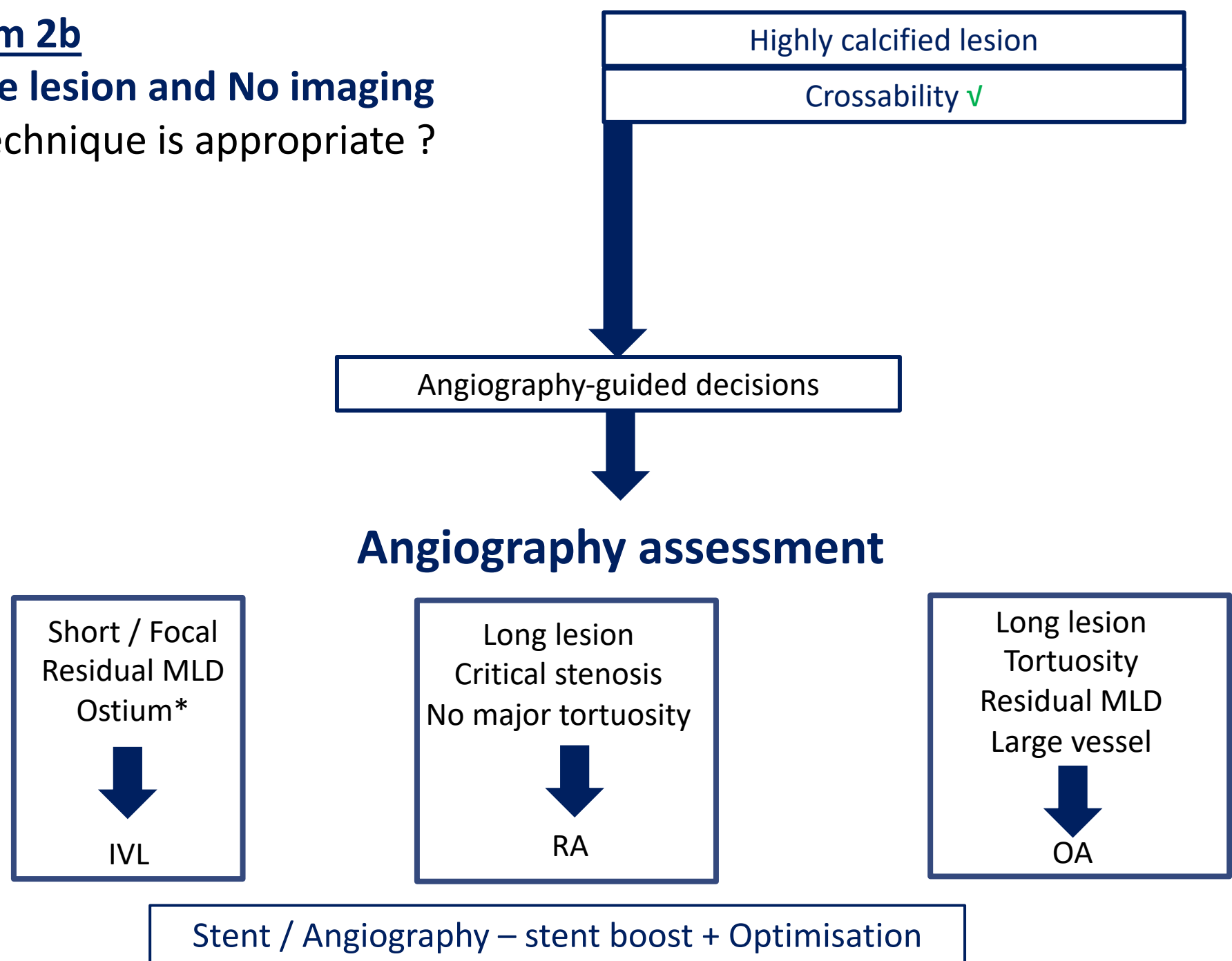


* Microcatheter exchange if crossable / Direct wiring otherwise

Algorithm 2b

Crossable lesion and No imaging

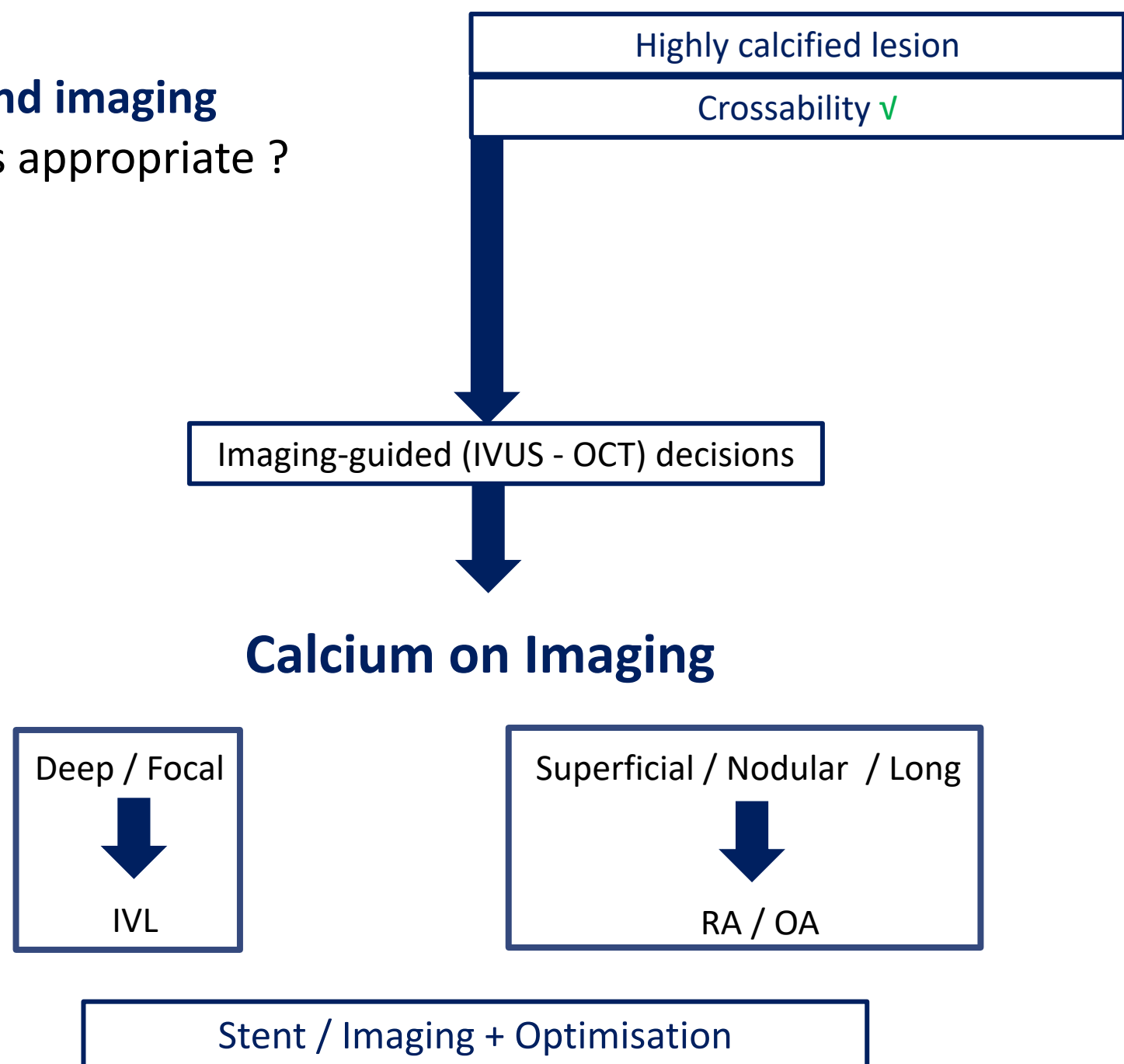
Which technique is appropriate ?



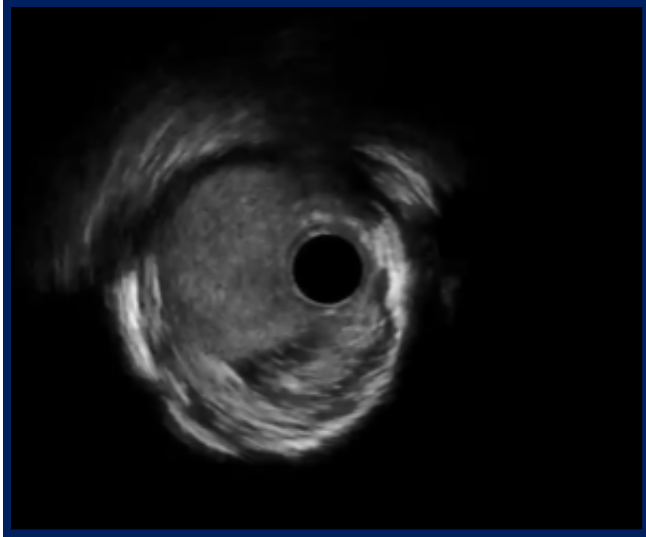
Algorithm 2c

Crossable lesion and imaging

Which technique is appropriate ?



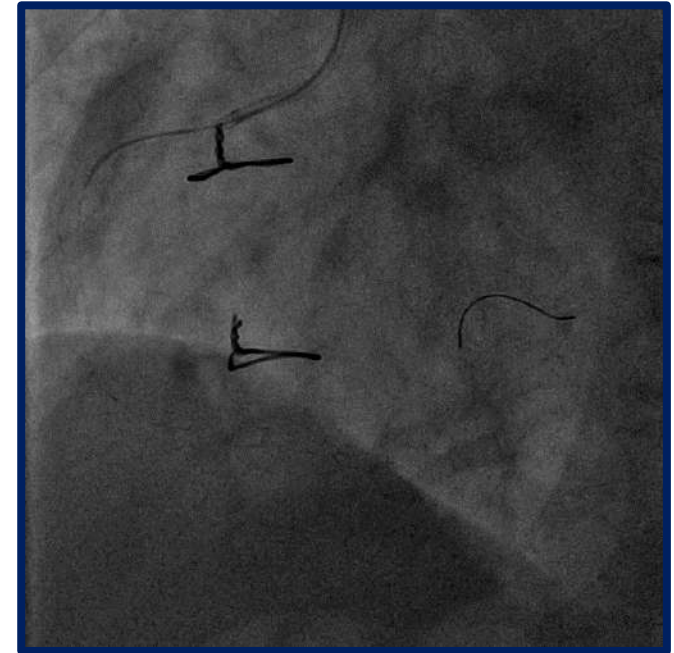
Case example



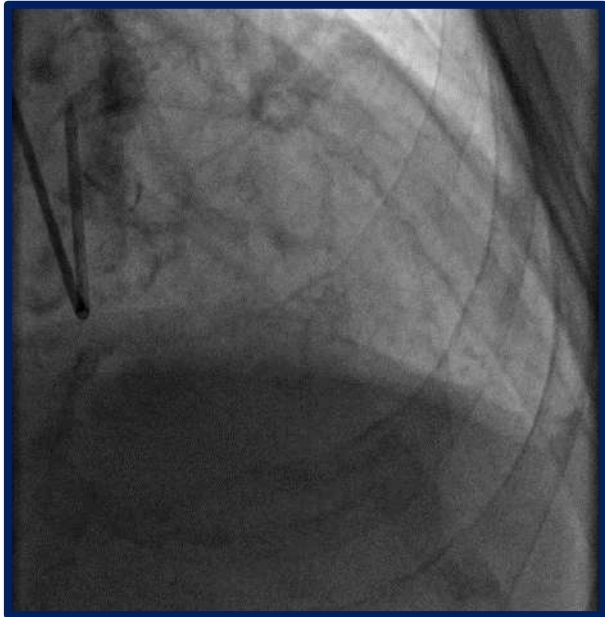
Crossable Lesion
Long calcium
RCA **3,5 mm**
Moderate **Tortuosity**
MLD **1,5 mm**



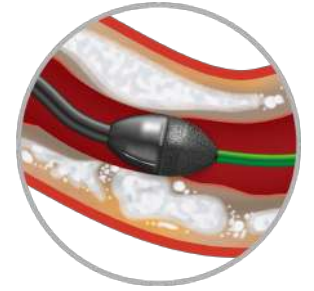
Orbital Atherectomy
Low and High Speed



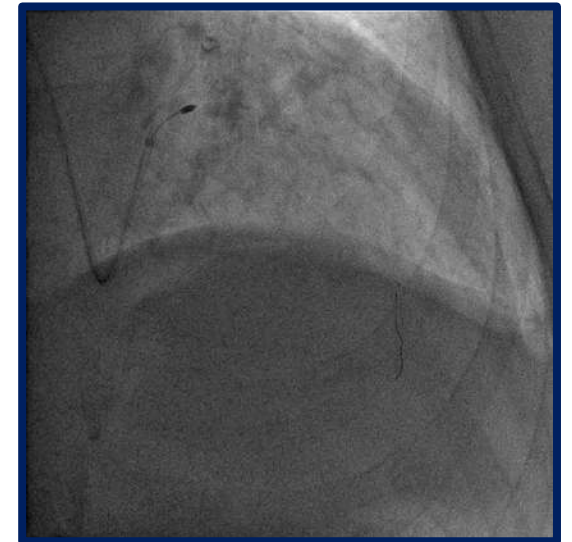
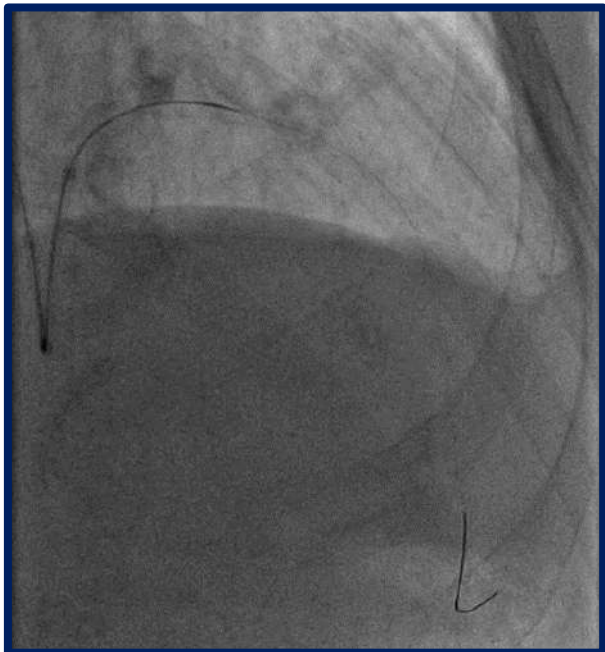
Case example



Uncrossable Lesion
Heavily calcified
Moderate Tortuosity



« Direct Wiring »
Rotationnal Atherectomy
1,5 mm Burr



Case example



Crossable Lesion
Heavily calcified
Focal
Deep and thick calcium



IVL 3.5

