Go Beyond Distal Cap: Techniques and Selection of Retrograde Guidewires

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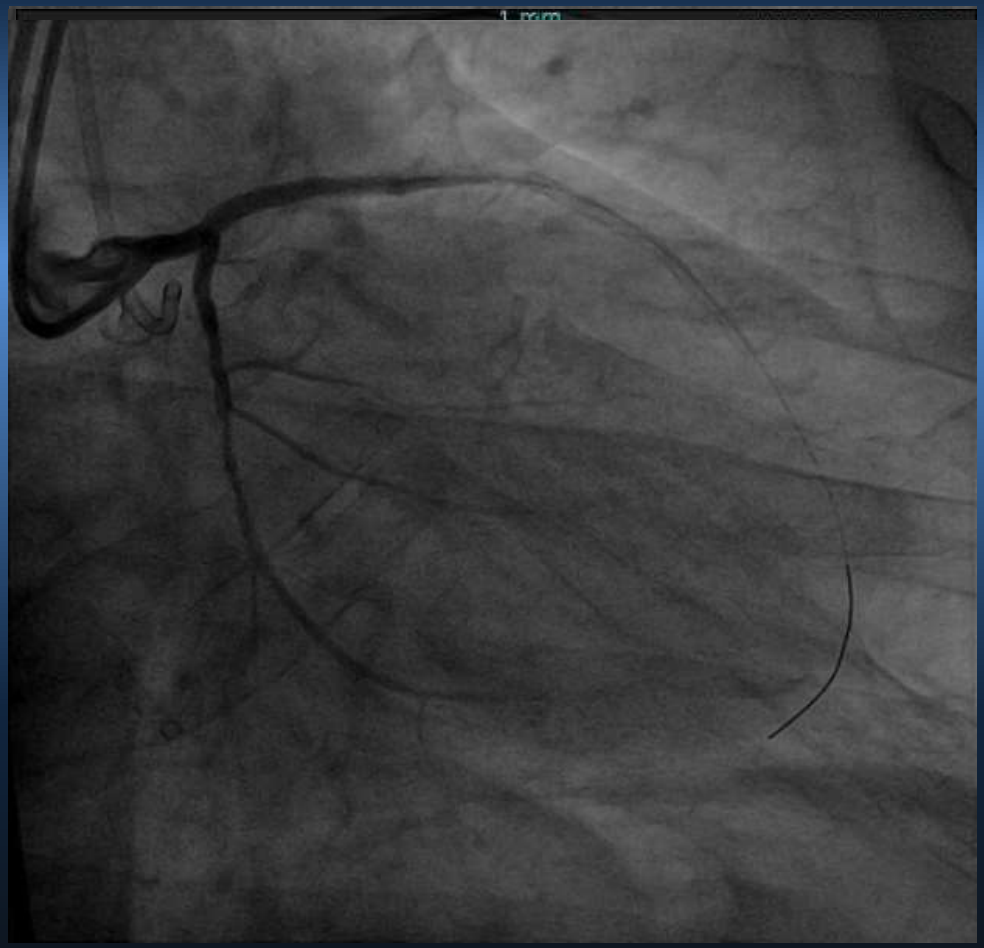
Disclosure Slide

- I, Masahisa Yamane, do not have any conflict of interest in the presentation

Contemporary Reverse CART

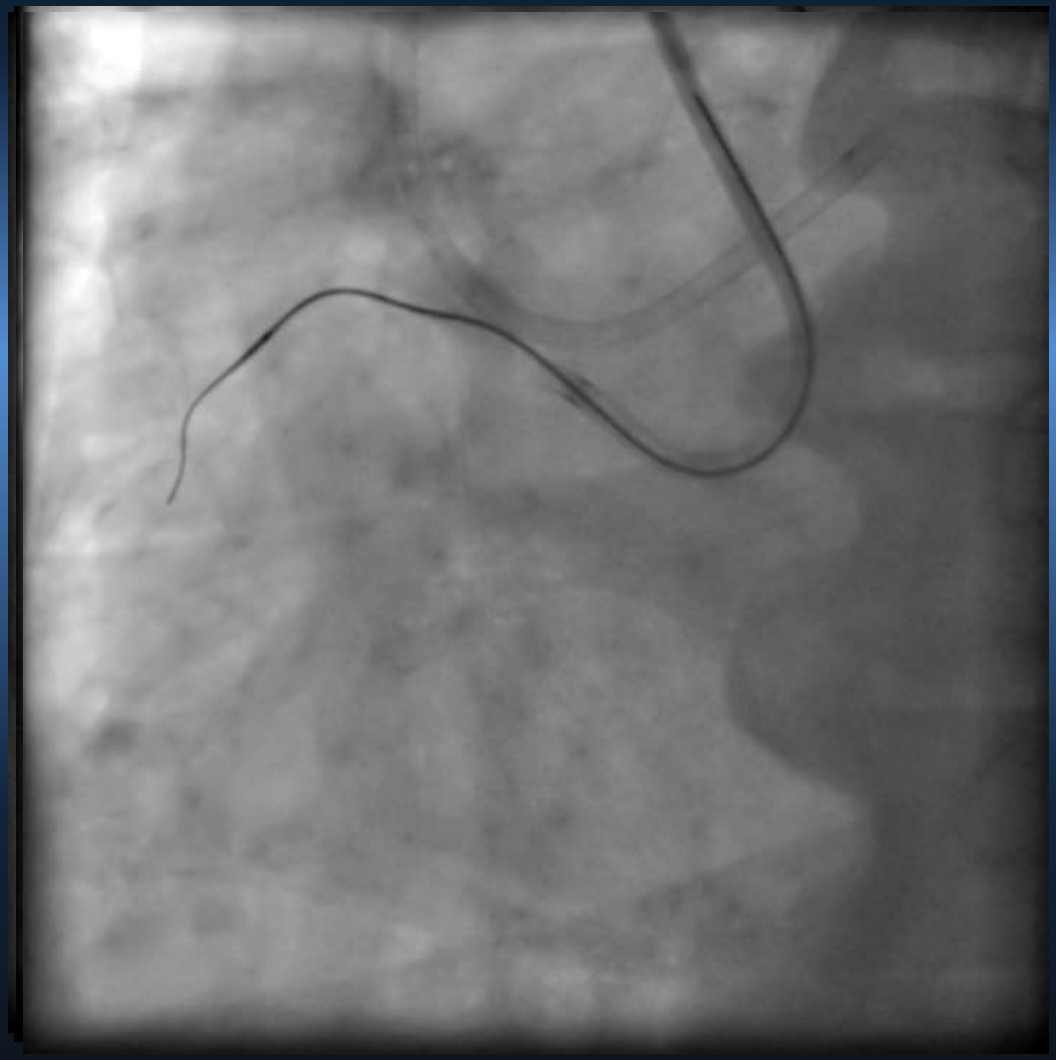


Retrograde LAD entry

Contemporary Reverse CART

Retro Wire & IVUS in Intima

Ca RCA CTO



Miracle 1 and 2 failed

Ca RCA CTO

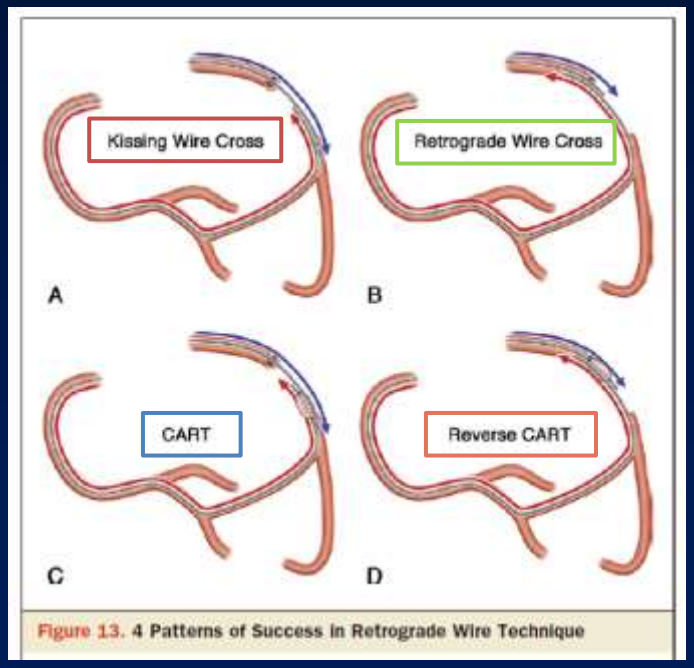
Rotablation 1.75 mm burr

Procedure characteristics (3)

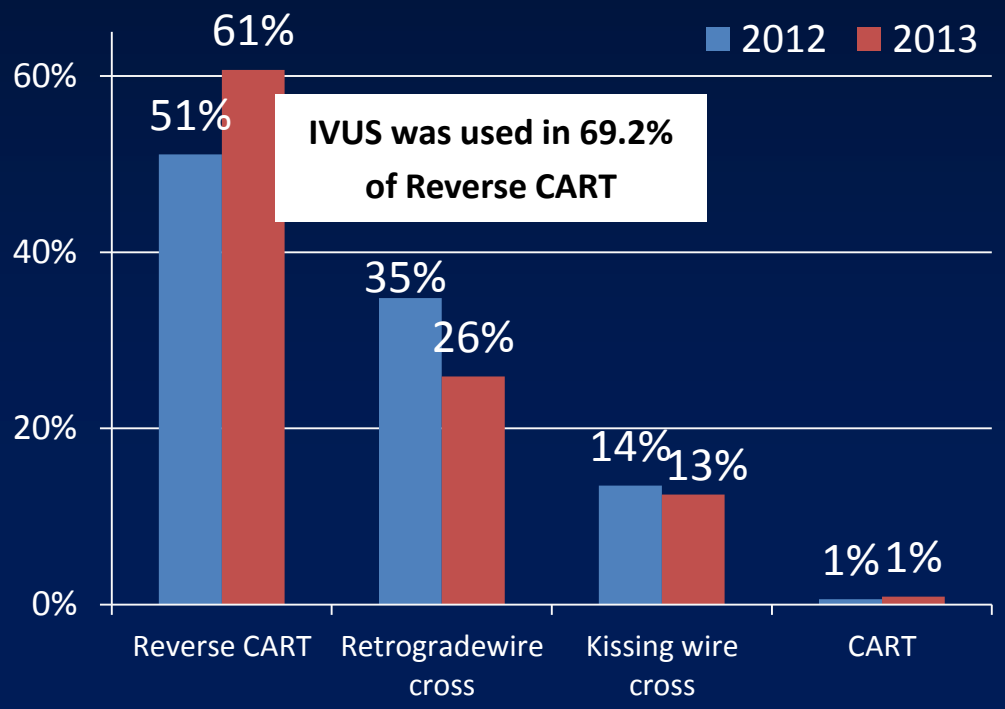
CTO crossing

	Total (1028)	2012 (490)	2013 (538)	P
Guidewire cross	65.5% (673)	69.0% (338)	62.3%(335)	0.0033

Patterns of Success in Retrograde Approach



Sumitsuji et al. JACC Cardiovasc Interv 2011



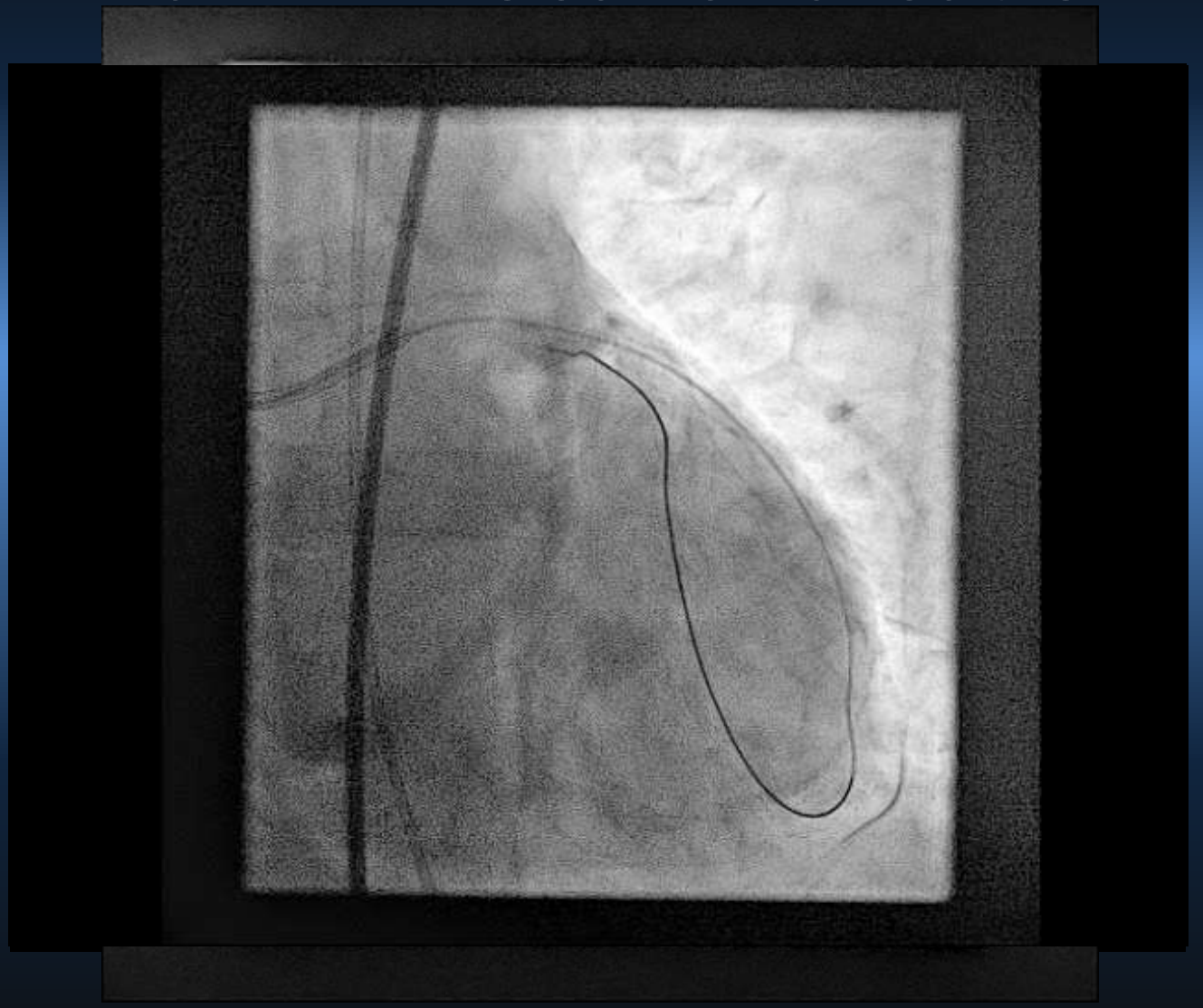
Wires in Retrograde Approach

- CTO Crossing and (Re) Entry

Applicable Wires in Retrograde Approach

- ***Reverse CART***
- ***Polymer Jacket wires***, XT-R, Sion Black, Sion, Fielder FC, Confianza Pro
- ***Contemporary Reverse CART***
- ***Composite Core wires,*** Gaia1,2,3 and Miracle Neo3

Proximal LAD focal bifurcation CTO



Gain to Goal 2

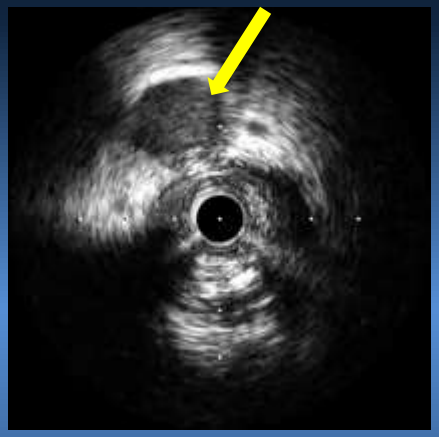
Gain to Goal 1

Gain to Goal Pack

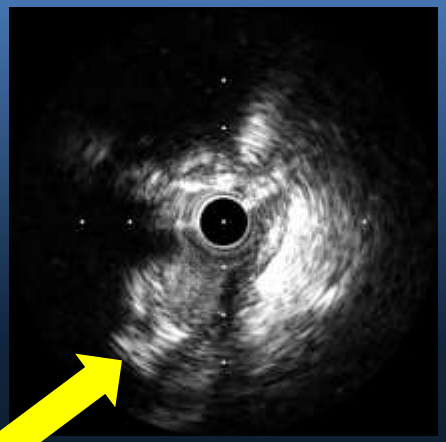
IVUS from LADDg

RAO Cranial

Subdivision branch



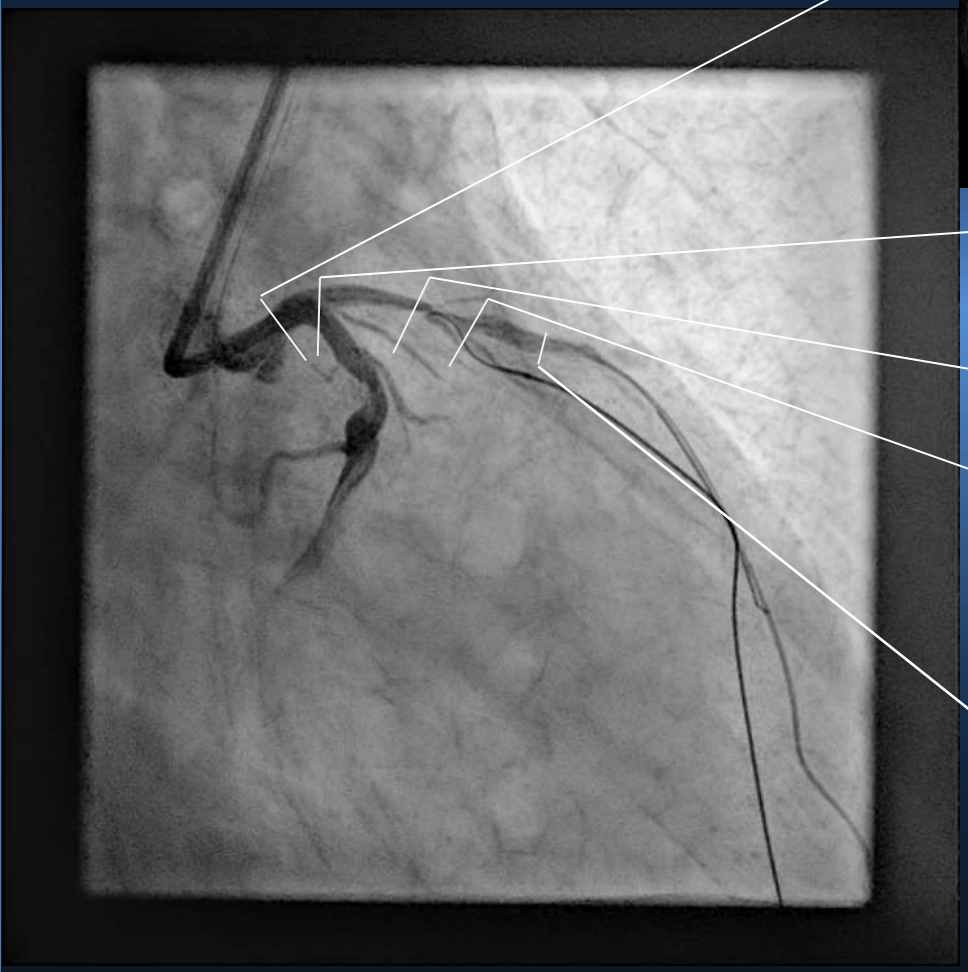
Distal LADDg

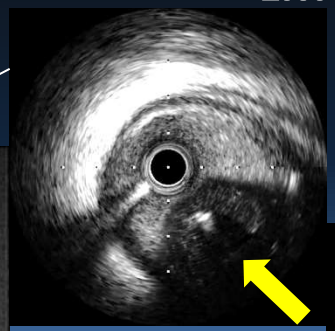


LAD Os

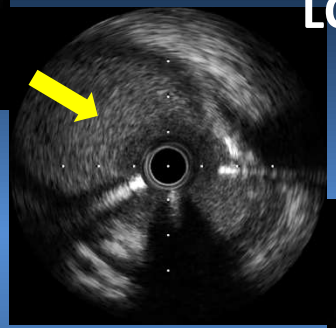
LAD-LADg Os

IVUS

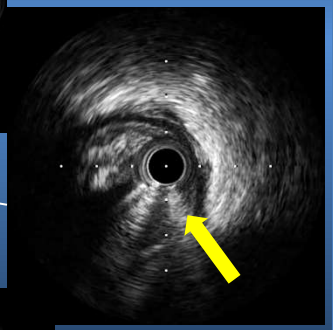




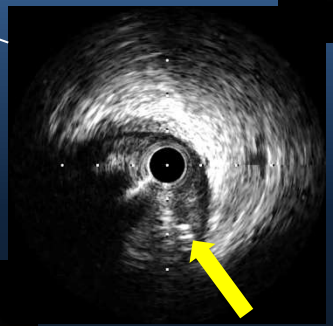
LMT

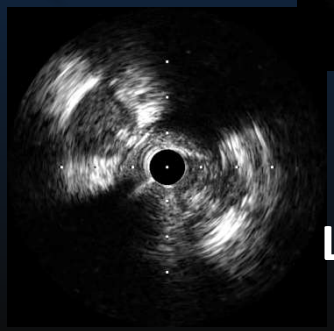


LCX Os



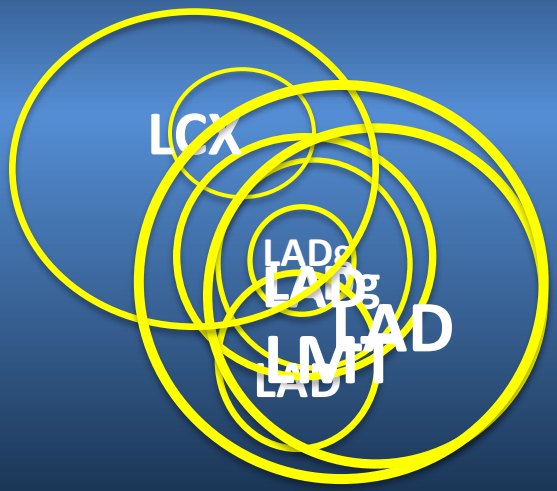
LAD Os

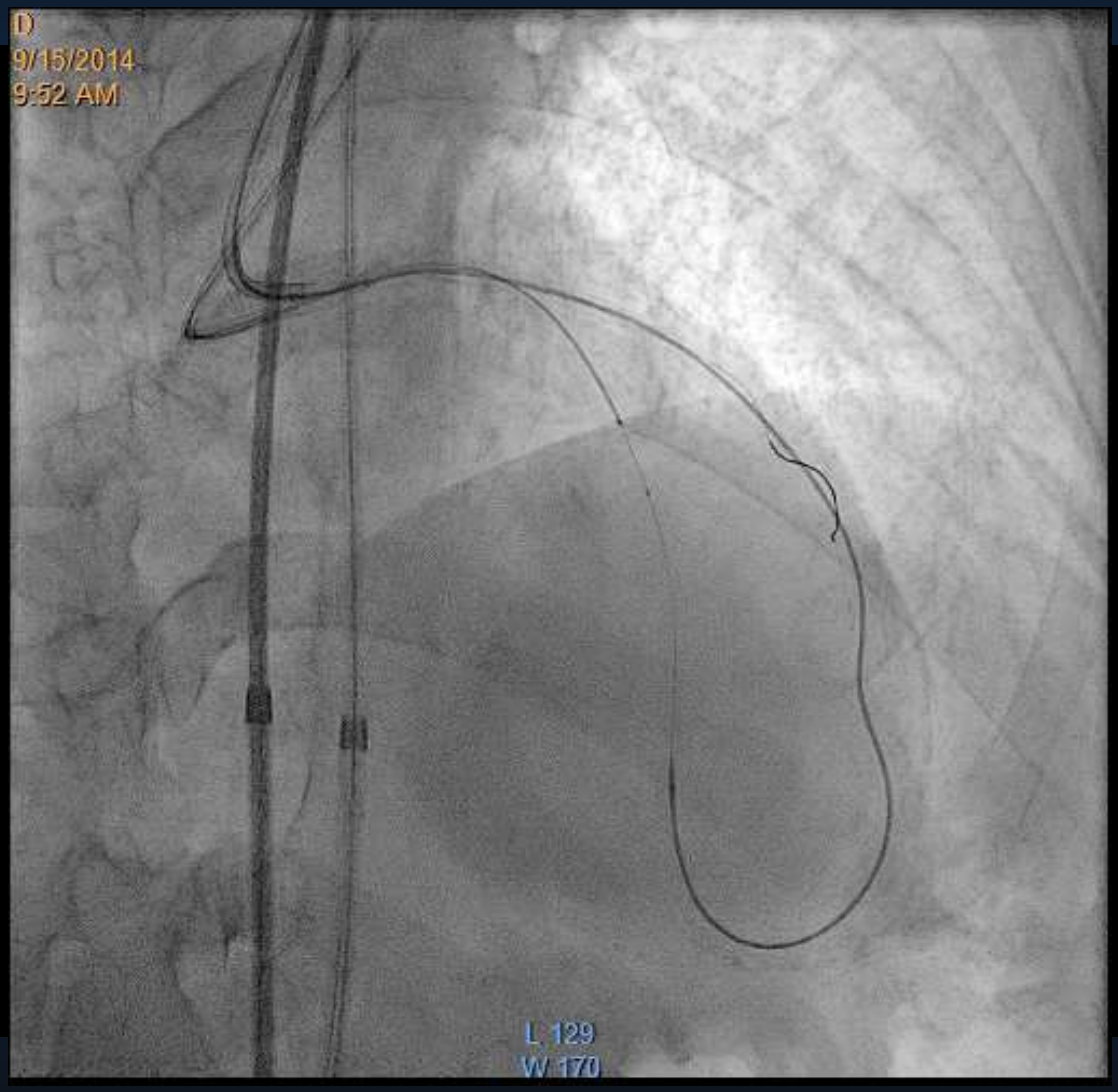




LADg

IVUS





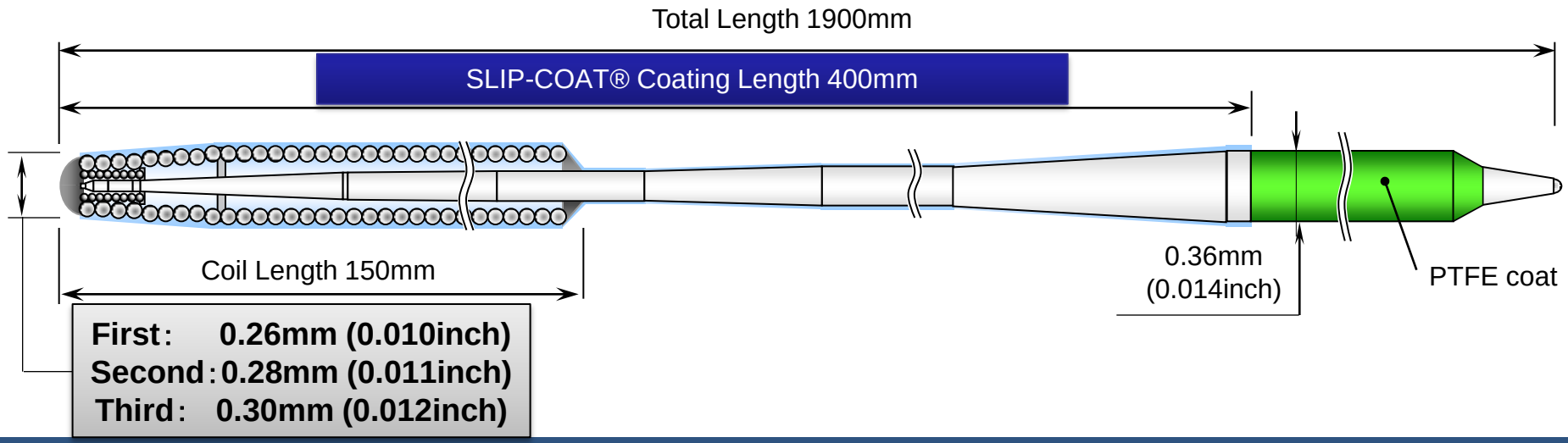
Balloon Angioplasty (75 U/kg IV Bolus)

Semi “CRUSH”

Applicable Wires in Retrograde Approach

- ***Reverse CART***
- ***Polymer Jacket wires***, XT-R, Sion Black, Sion, Fielder FC, Confianza Pro
- ***Contemporary Reverse CART***
- ***Composite Core wires,*** Gaia1,2,3 and Miracle Neo3
- ***Retrograde Crossing***
- Gaia series, Miracle Neo3g, Confianza Pro

Spec of Gaia



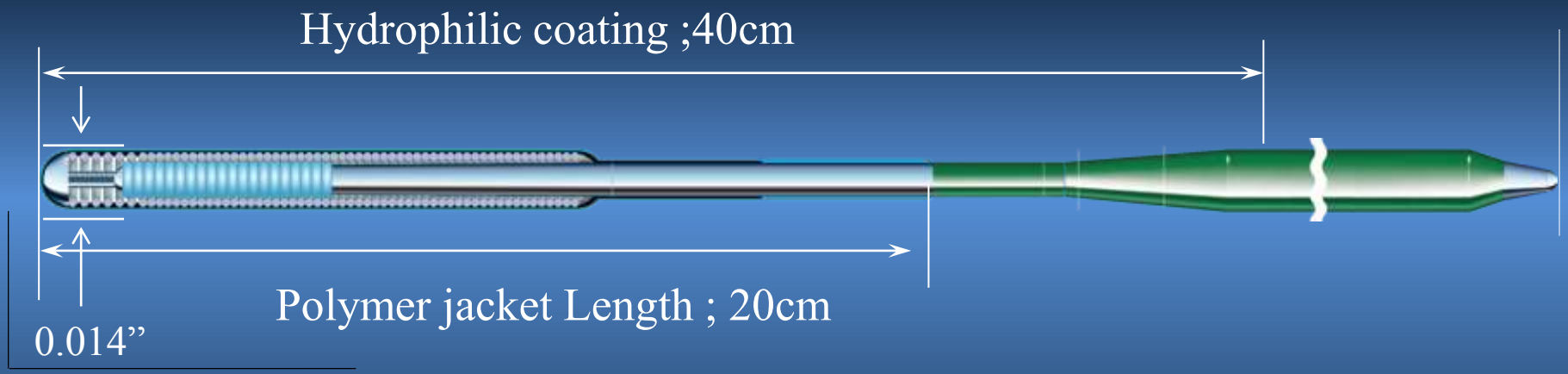
Various lineups for the different situation or lesion

ASAHI Gaia First	Diameter : 0.26mm (0.010”) - 0.36mm (0.014”) **Tip load : 1.7gf**
ASAHI Gaia Second	Diameter : 0.28mm (0.011”) - 0.36mm (0.014”) **Tip load : 3.5gf**
ASAHI Gaia Third	Diameter : 0.30mm (0.012”) - 0.36mm (0.014”) **Tip load : 4.5gf**

Long hydrophilic coating that enhance the smooth controllability in micro catheter.

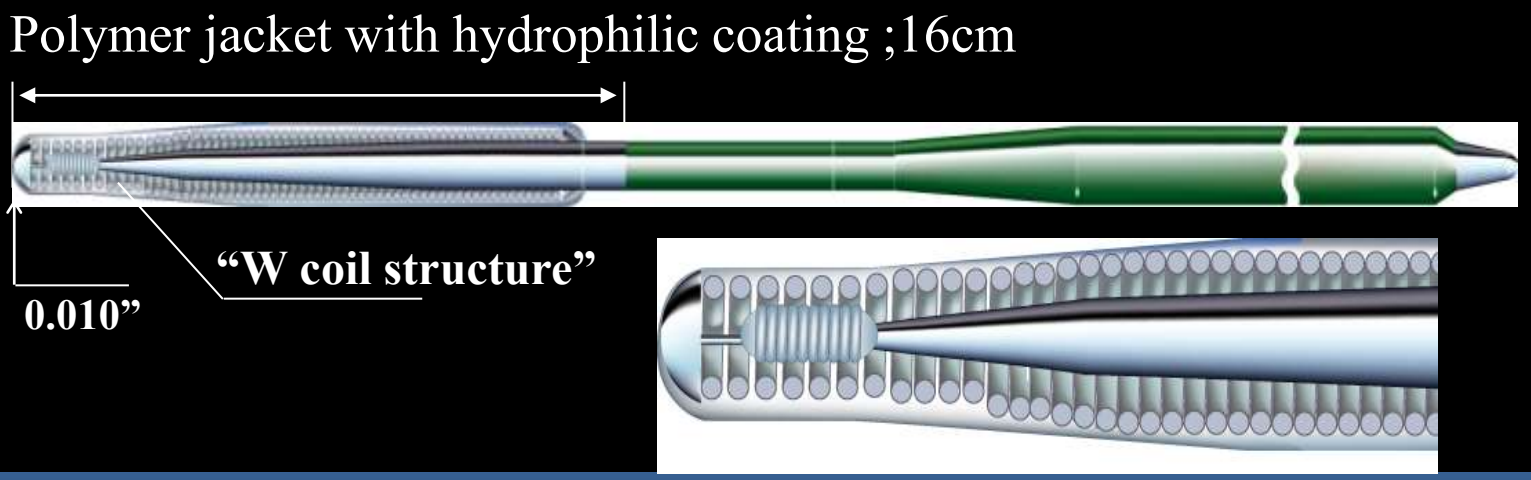
SION black

Not approved in US



- ✓ **Workhorse wire**
- ✓ **Composite core**
- ✓ **Tip load = 0.8g**
- ✓ ***Polymer jacket wire*** **with hydrophilic coating**

Fielder XT-R



- ✓ Guidewire for channel tracking or First choice for total occlusion
- ✓ Composite core
- ✓ Tip load = 0.6g
- ✓ *Polymer jacket wire* with hydrophilic coating

What matter s most ...

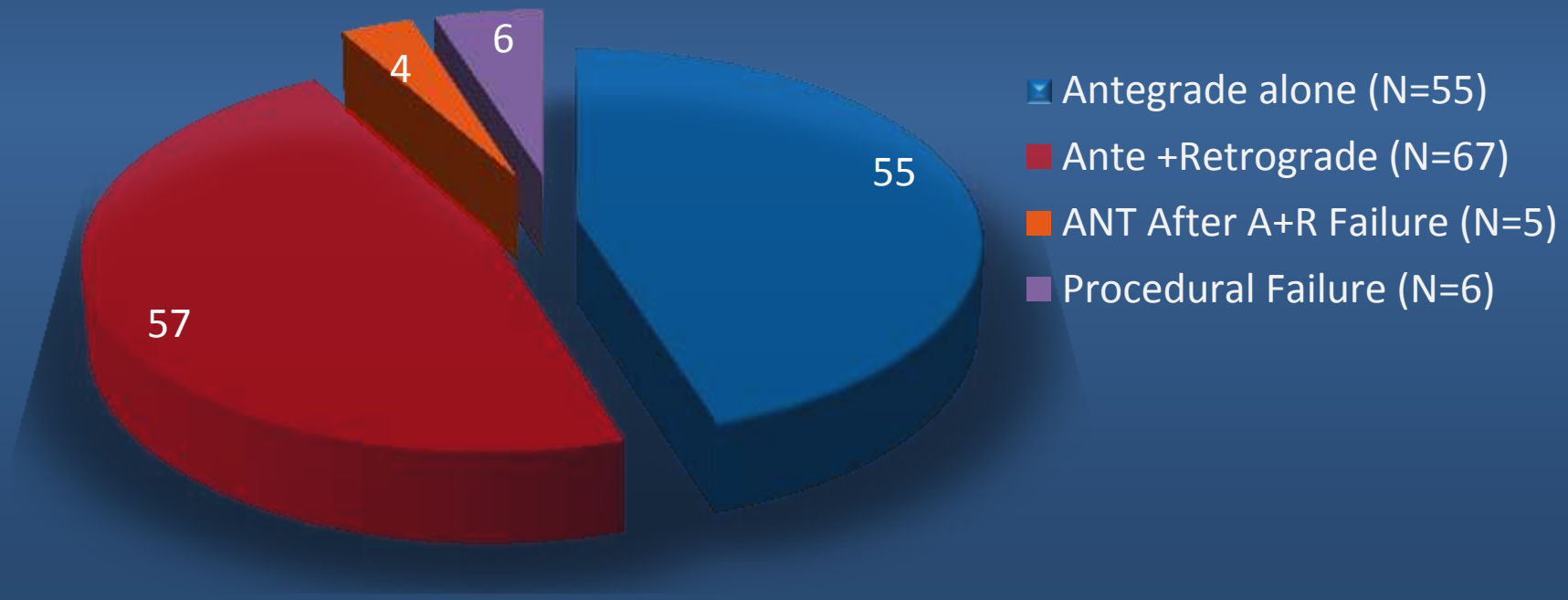
Retro Wire in Intima/ IVUS in Subintima

How to get over difficulty?

Ante-Subintima/ Retro-Intima

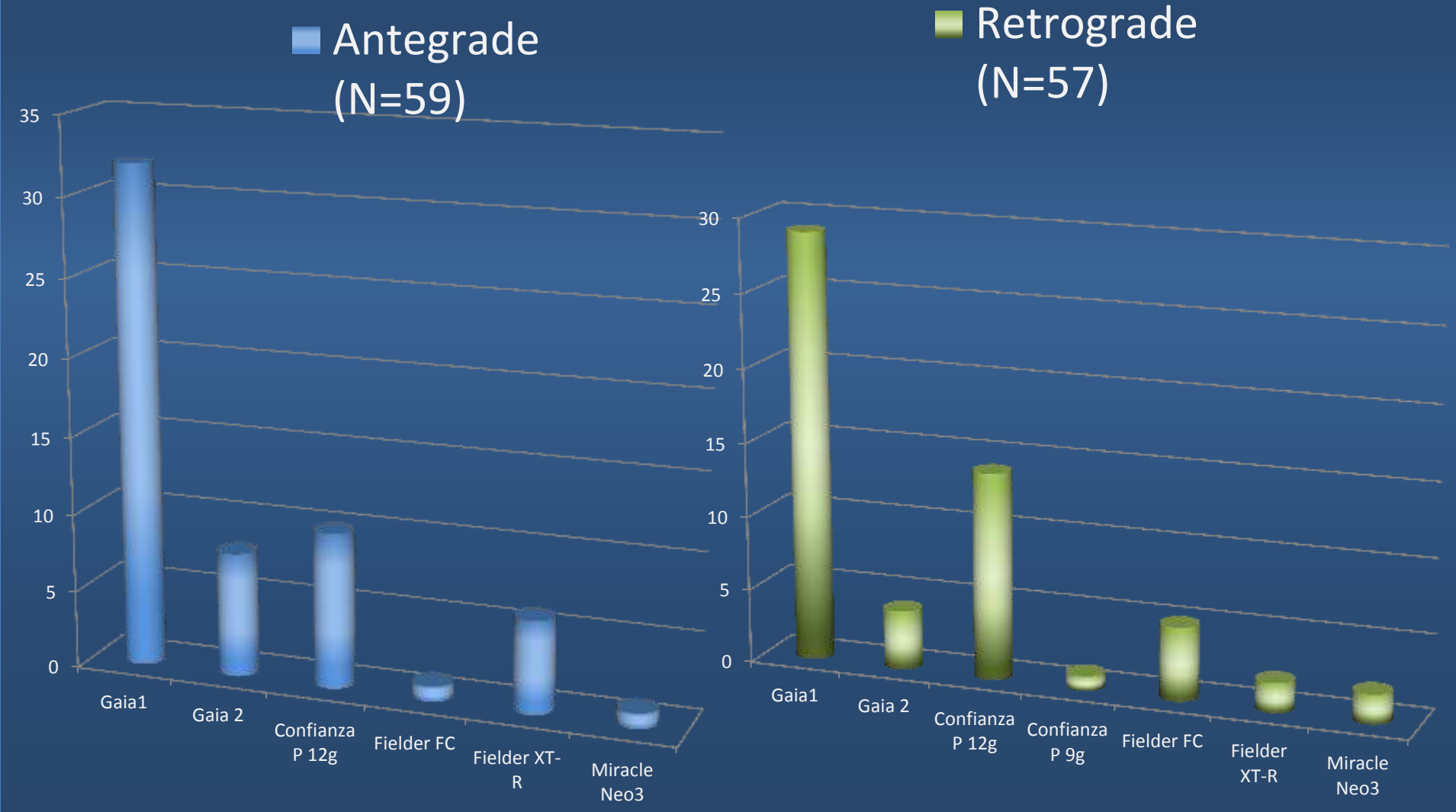
After retrograde wire re-entering

Success Rate 116/122 After Gaia in 2012-2013



2 Collateral Rapture/ Autologous fat embolization
1 Septal Rapture/hematoma growing/ wire decompression
1 transfusion over prolonged procedure
1 cardiac arrest due to grobal ischemia/ revascularized and saved with full mechanical

CTO Crossing Wires (2012-2013)



Techniques and Selection of Retrograde Guidewires

1. Direct crossing possible in some CTOs
2. Reverse CART : choice of (re)entry
3. Conventional sense* Polymer Jacked wires
4. Contemporary Reverse CART* Gaia series
5. Assess wire position in the CTO, esp with IVUS
6. Minimum extension/subintima and maximum intima

CTO Club 2015,

June 19-20, Nagoya, Japan