

Transradial Access for Peripheral Angioplasty

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Disclosure

Speaker name:

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- I have the following potential conflicts of interest to report:
 - Consulting
 - Employment in industry
 - Shareholder in a healthcare company
 - Owner of a healthcare company
 - Other(s)**
- I do not have any potential conflict of interest

Radial versus femoral access for coronary angiography and intervention in patients with acute coronary syndromes (RIVAL): a randomised, parallel group, multicentre trial

Sanjit S Jolly, Salim Yusuf, John Cairns, Kari Niemelä, Denis Xavier, Petr Widimsky, Andrzej Budaj, Matti Niemelä, Vicent Valentin, Basil S Lewis, Alvaro Avezum, Philippe Gabriel Steg, Sunil V Rao, Peggy Gao, Rizwan Afzal, Campbell D Joyner, Susan Chrolavicius, Shamir R Mehta, for the RIVAL trial group*

	Radial (n=3507)	Femoral (n=3514)	HR (95% CI)	p value
Major vascular complications at 30 days				
Large haematoma	42 (1.2%)	106 (3.0%)	0.40 (0.28-0.57)	<0.0001
Pseudoaneurysm needing closure	7 (0.2%)	23 (0.6%)	0.30 (0.13-0.71)	0.006
Arteriovenous fistula	0 (0%)	5 (0.1%)
Ischaemic limb needing surgery	1 (0%)*	0 (0%)

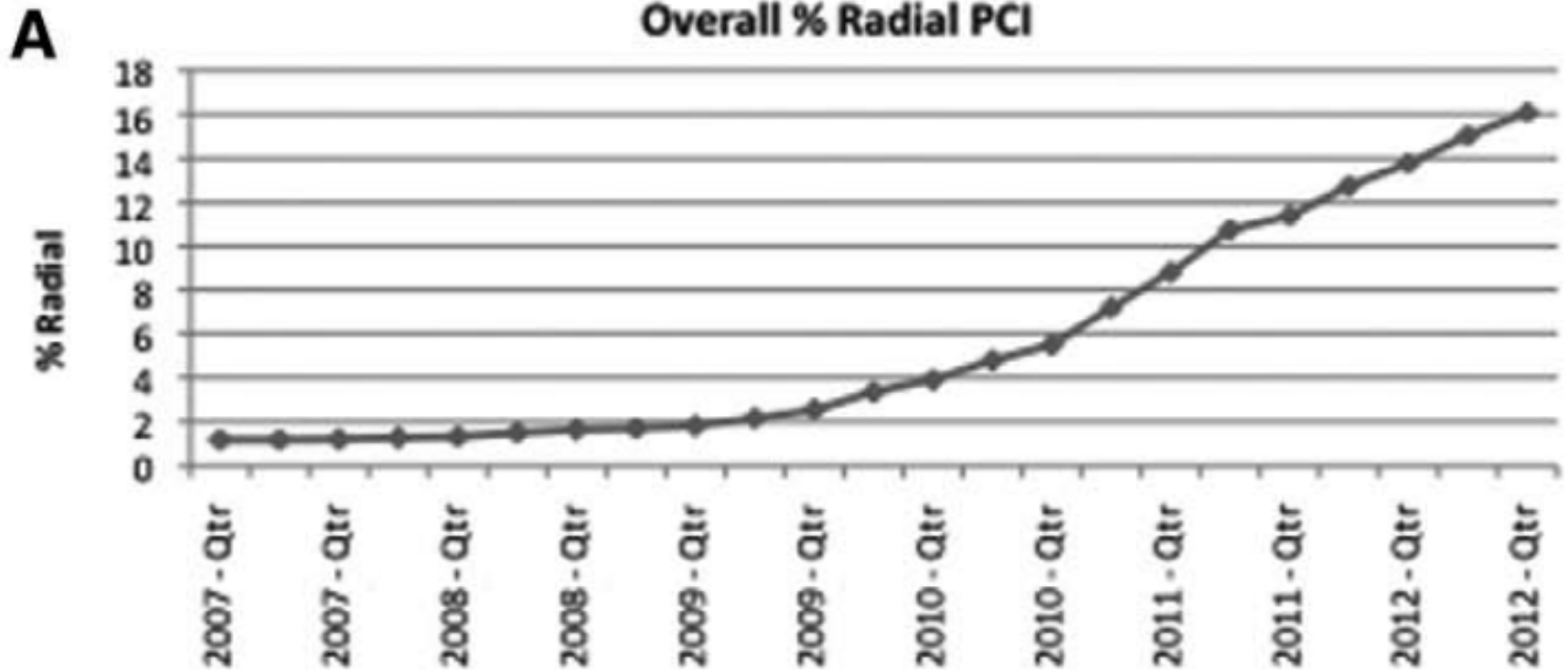
Jolly et al. RIVAL trial, Lancet 2011

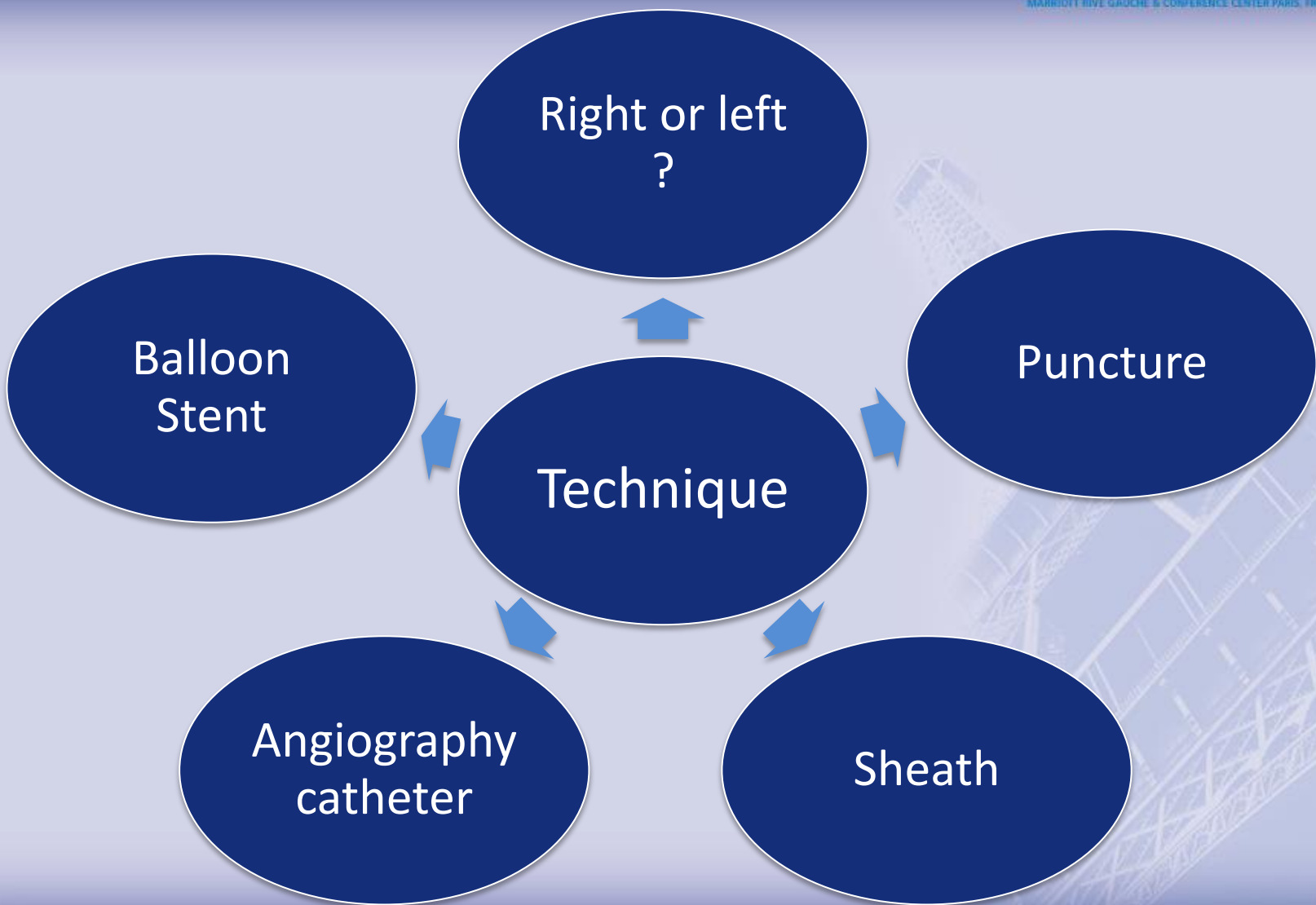
Transradial PCI = 50%

Puymirat et al. Registre National ONACI Am J Cardiol 2013

PCI (2007 – 2012)

N = 2 820 274





Right or Left ?

LEFT

Less arch navigation

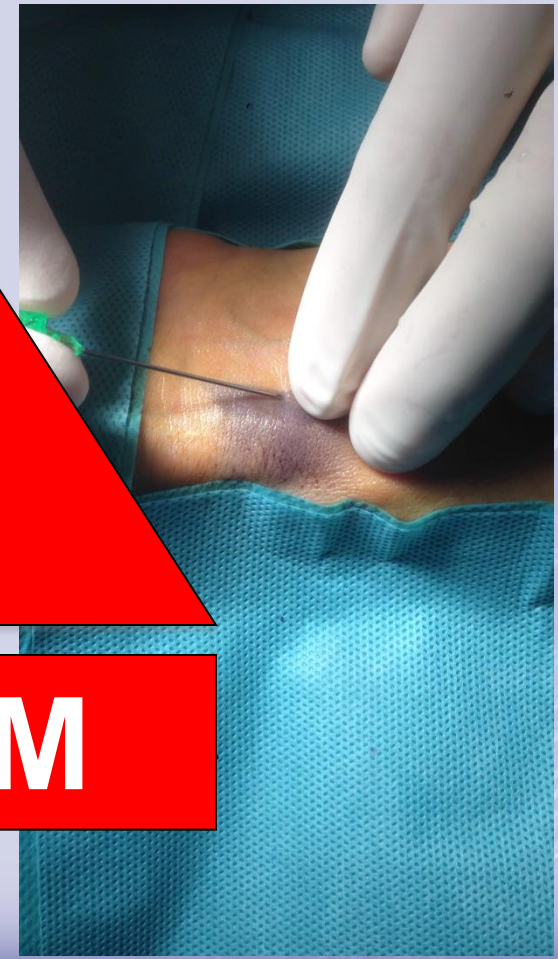
Less tortuosity

Gain 5 - 10 cm

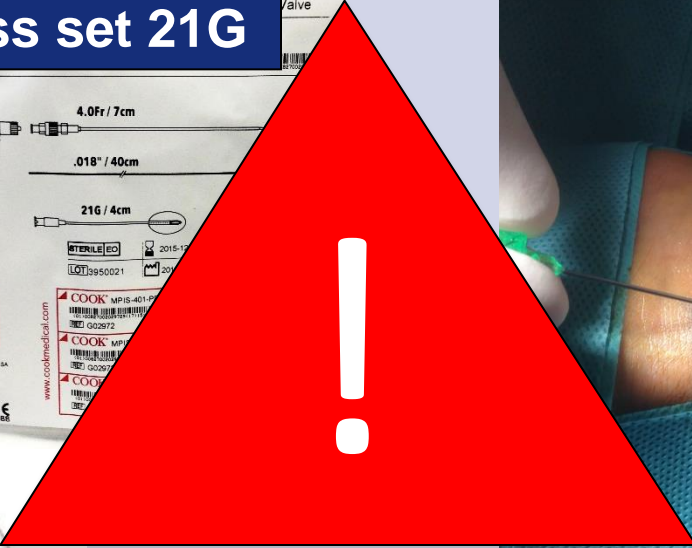
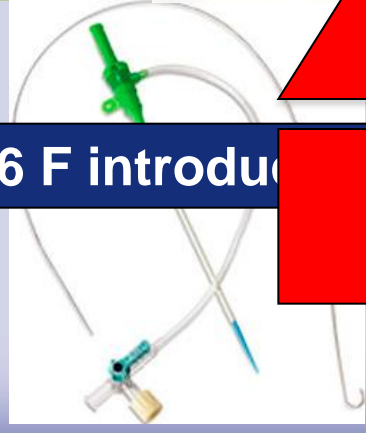
But « inverted » installation

Puncture

Transpedal access set 21G

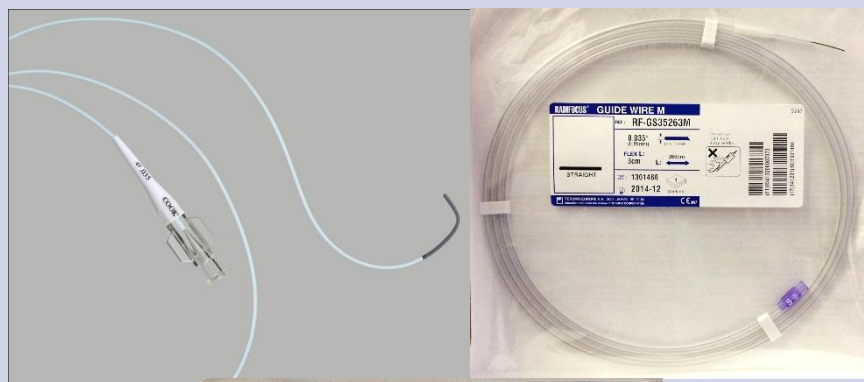


Short 6 F introducer

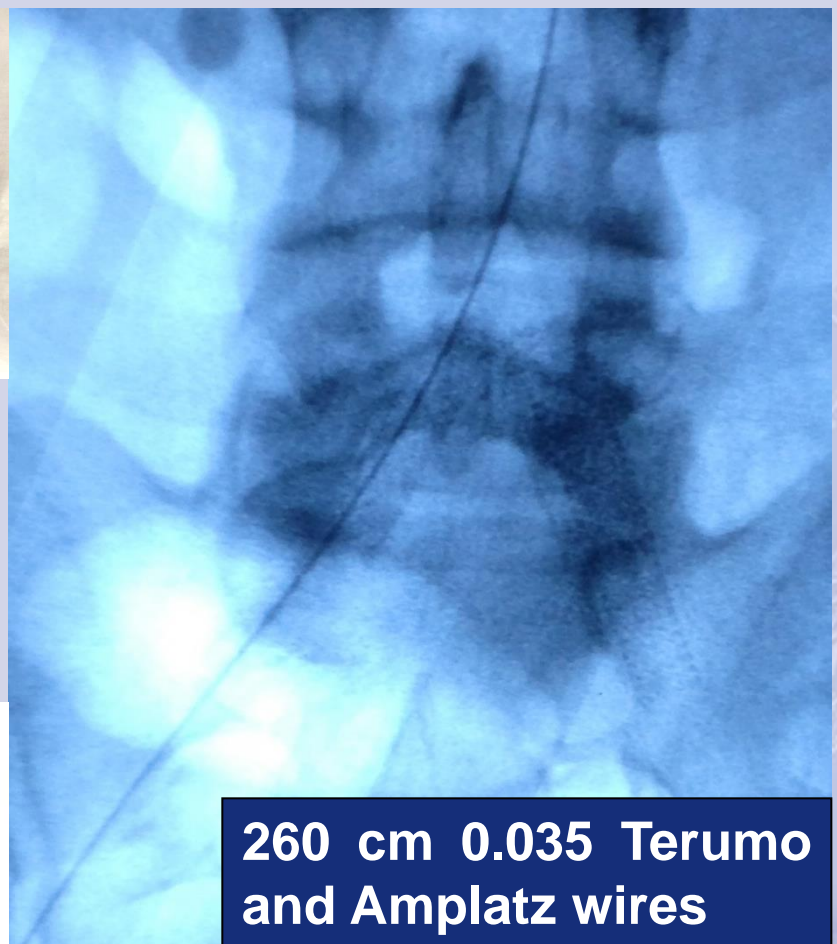


SPASM

Navigation

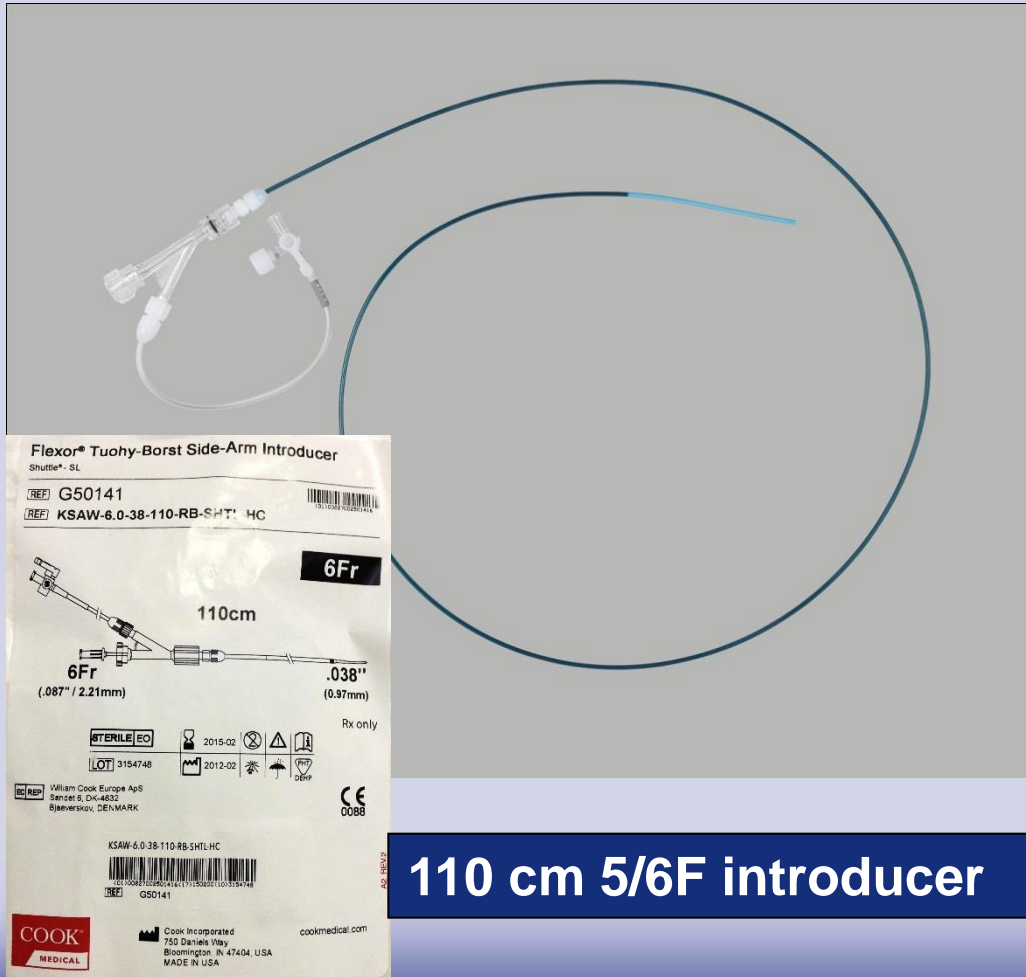


C2, Pig-Tail, Judkins right

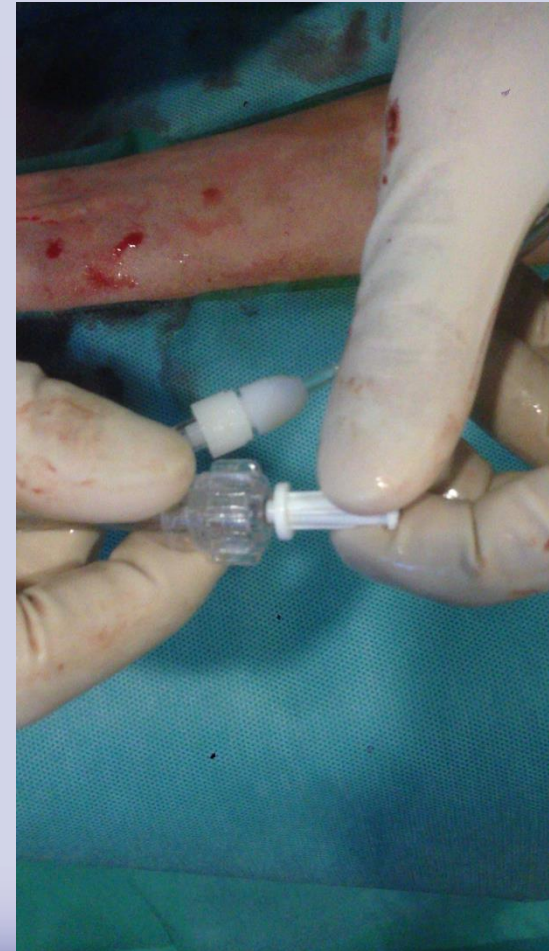


260 cm 0.035 Terumo and Amplatz wires

Sheath



110 cm 5/6F introducer



Sheathless Guiding catheter

6 F

7 F

8 F

2.52

2.85

3.22

Sheath

1.98

Radial
Artery
2.6 mm

2.31

2.64

1.98

2.31

2.64

Guiding
catheter

1.80

2.00

Radial
Artery
2.6 mm

Sheathless Guiding catheter



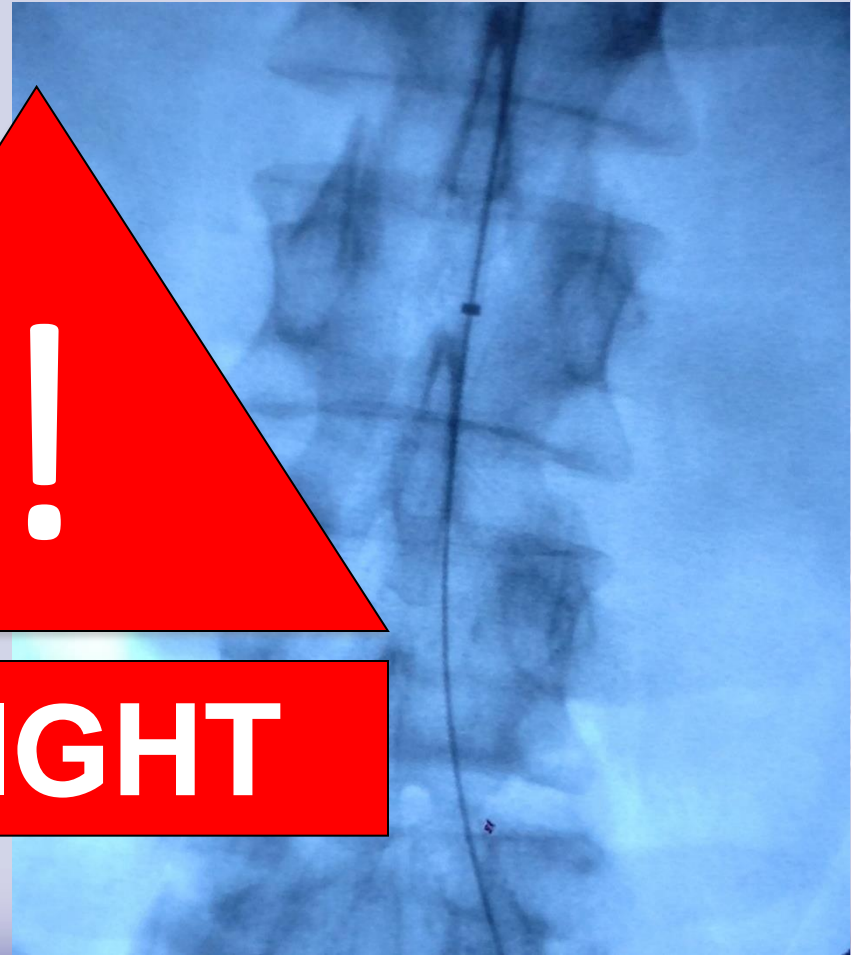
Sheathless PV Asahi
2.80 mm



Radial Artery
2.6 mm

120 cm 8.5F Guiding catheter

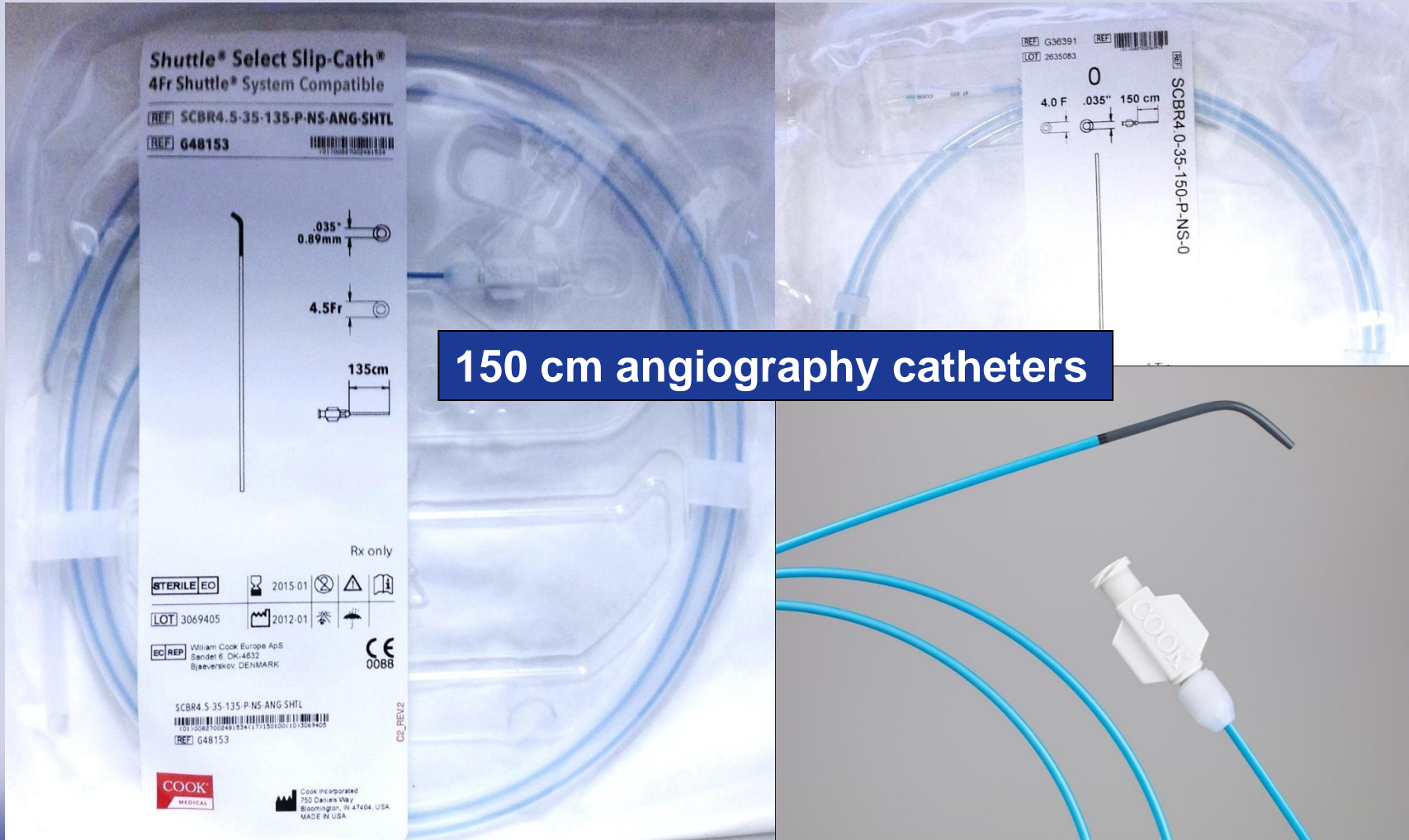
Technique



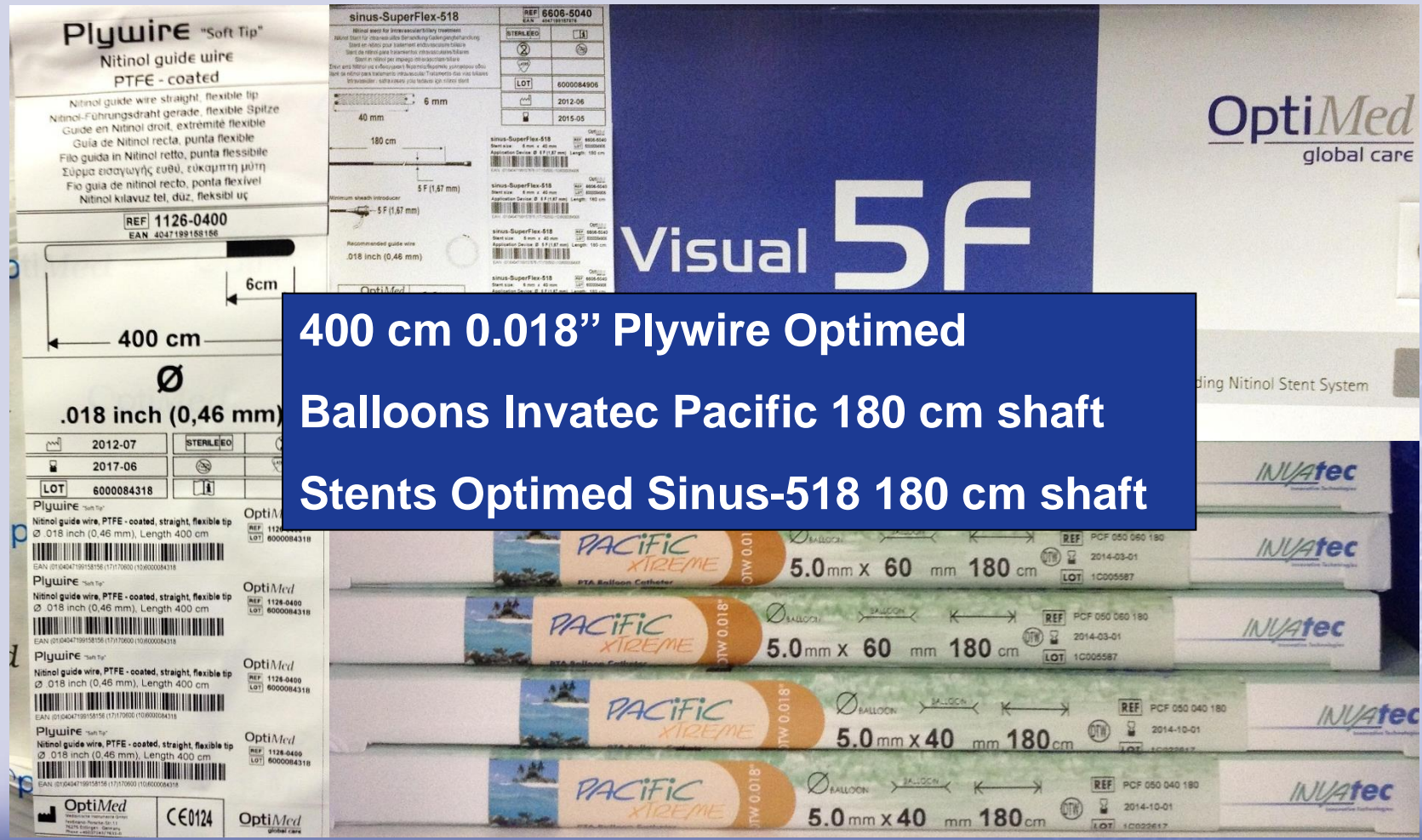
!

HEIGHT

Technique



Technique - SFA



Results

Percutaneous radial access for peripheral transluminal angioplasty

Raphaël Coscas, MD, Romain de Blic, MD, Clément Capdevila, MD, Isabelle Javerliat, MD, Olivier Goëau-Brissonniere, MD, PhD, and Marc Coggia, MD, *Boulogne-Billancourt and Montigny-le-Bretonneux, France*

Journal of
Vascular Surgery®

Tailored Use of Transradial Access for Above-the-Knee Angioplasty

Roberto Lorenzoni, MD¹; Cristiano Lisi, MD¹; Anca Corciu, MD, PhD²; Mauro Lazzari MD¹;
and Francesco Bovenzi, MD¹

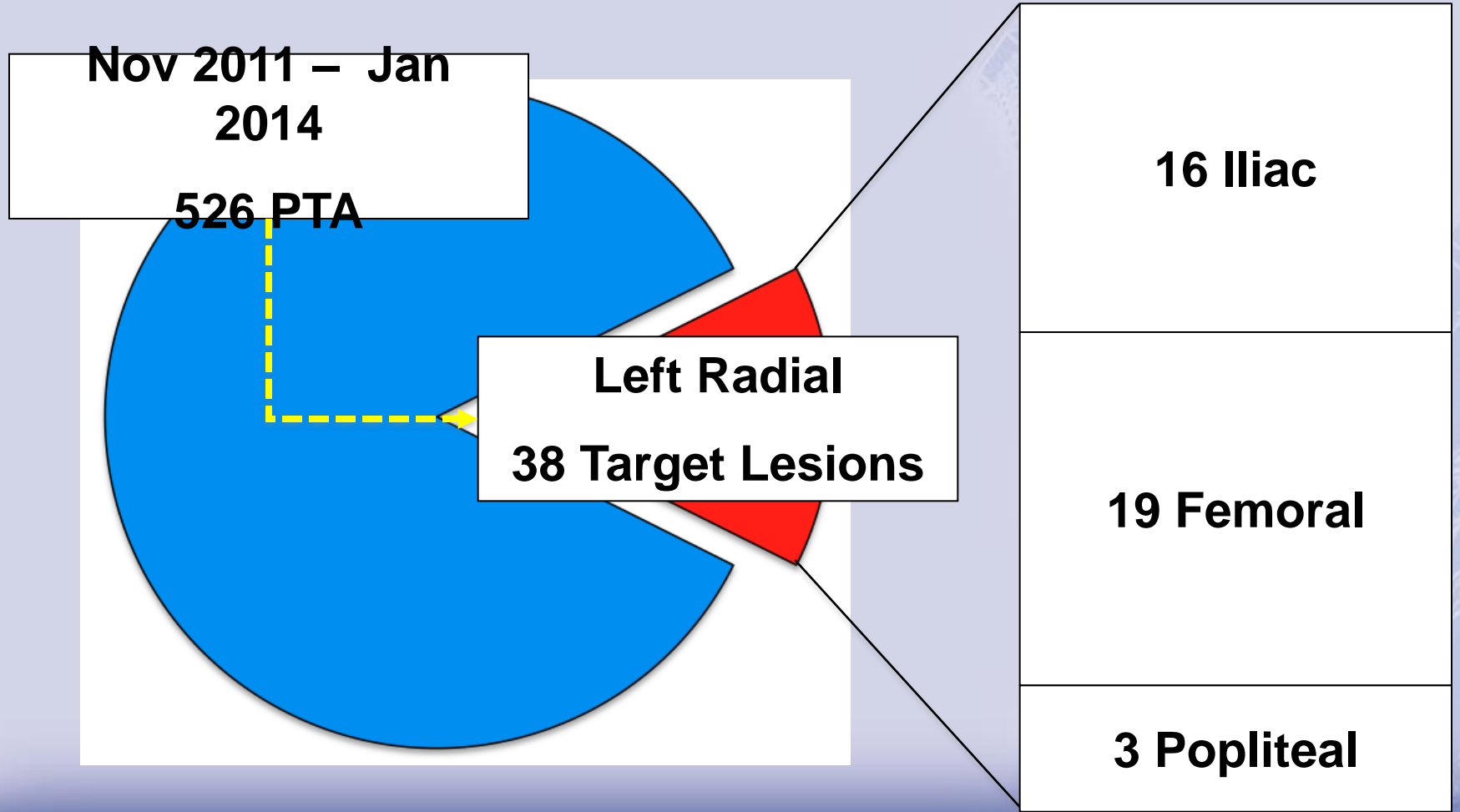
JOURNAL OF
ENDOVASCULAR
THERAPY

An official journal of the

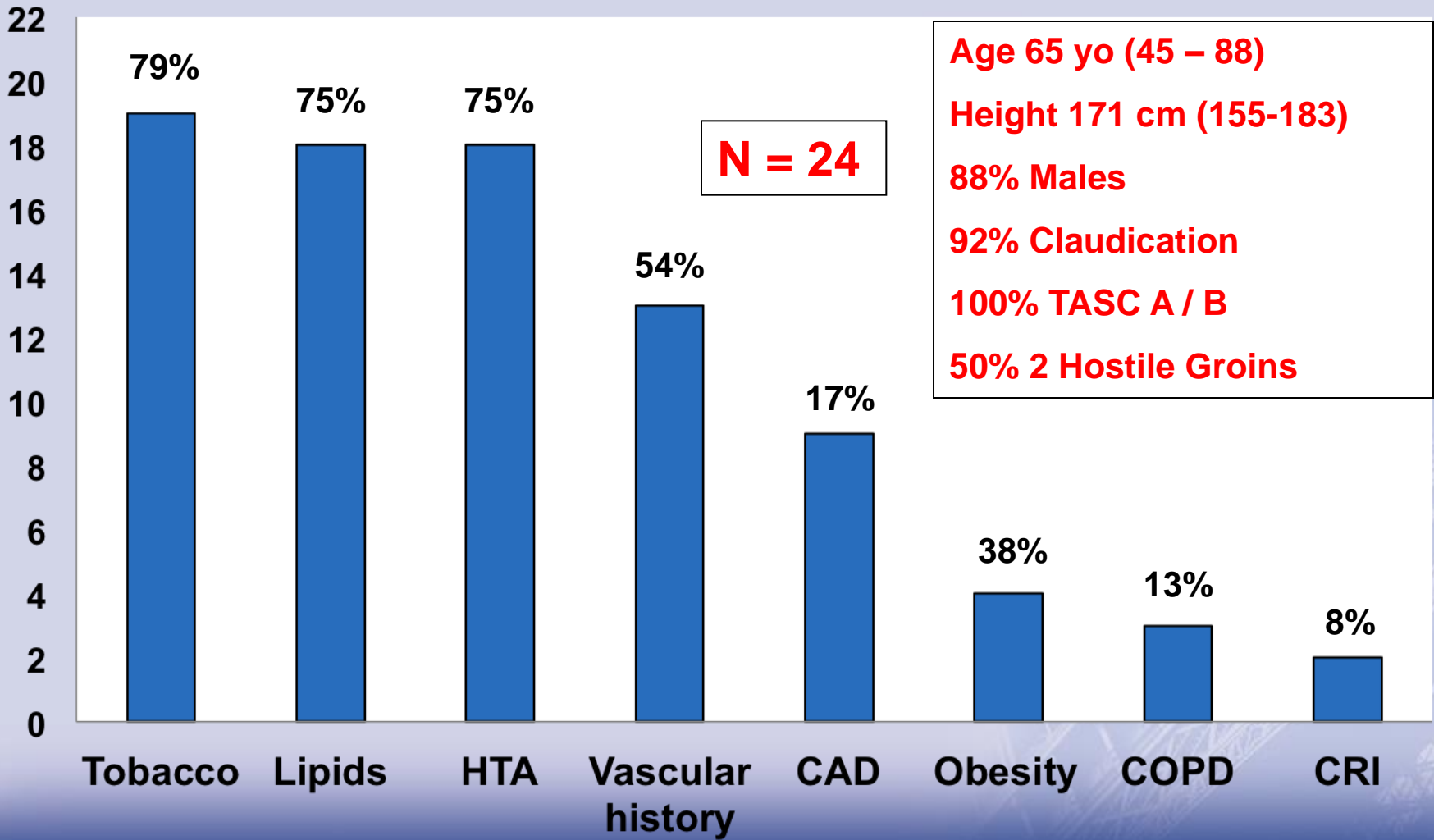


**INTERNATIONAL SOCIETY OF
ENDOVASCULAR SPECIALISTS**

Population N = 24



Population



Intraoperative Results

Radial Approach = 96% (23/24)

1 Spasm → Brachial Access

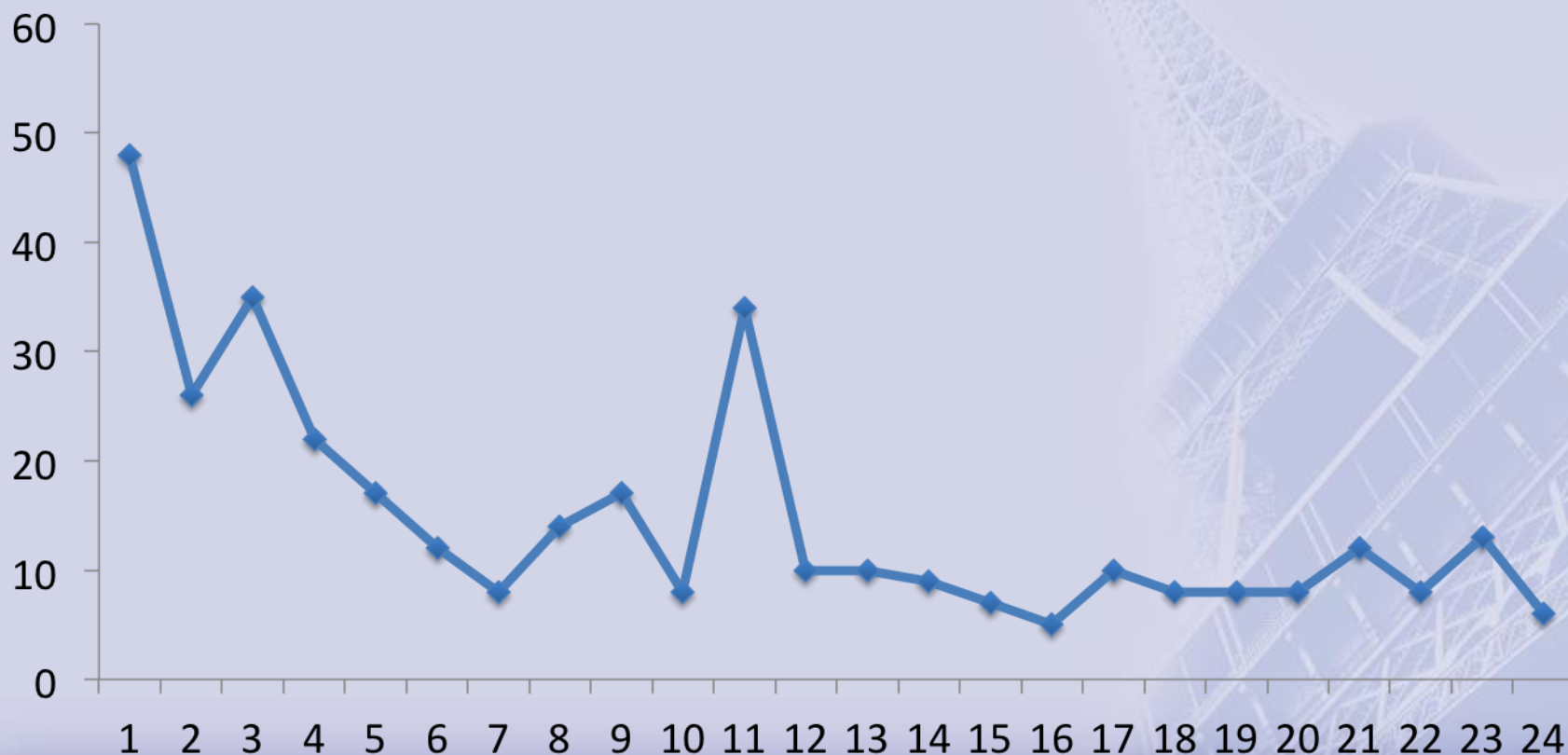
Technical Success = 97% (37/38)

1 SFA Recanalization Failure

Procedural time	=	45 min	(25-120)
Fluoroscopy	=	9 min	(5-35)
Contrast	=	40 cc	(20-90)

Learning Curve

Fluoroscopy Time



Complications

General Morbidity

N = 1 (4%)

1 Ischaemic stroke
(Rankin 2)

**No Patient > 80 y
Arch CT-Scan**

Local Morbidity

N = 2 (9%)

2 Radial rupture
SPASM

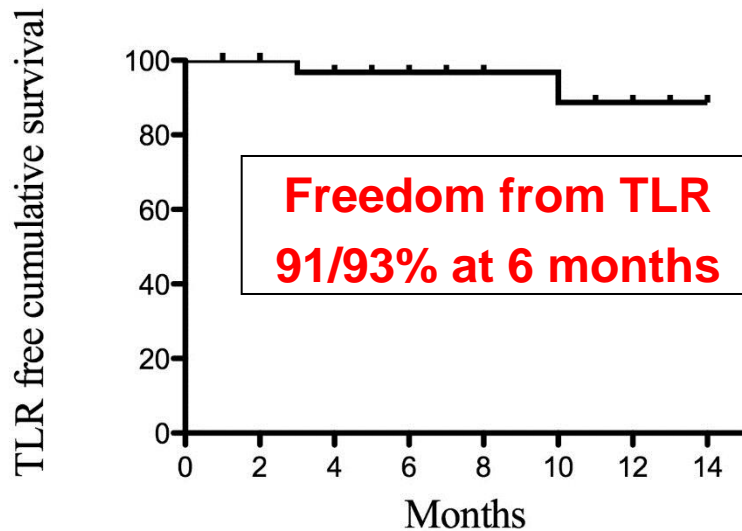
Vasodilators Protocol

Follow-up

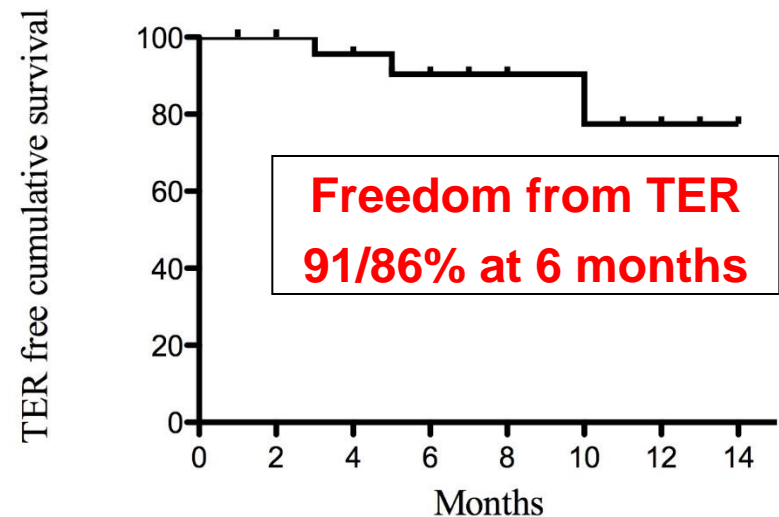
8 months (1-23) = 3 events

3 endovascular reinterventions (3, 5, 10 months)

3 radial occlusions (13%)



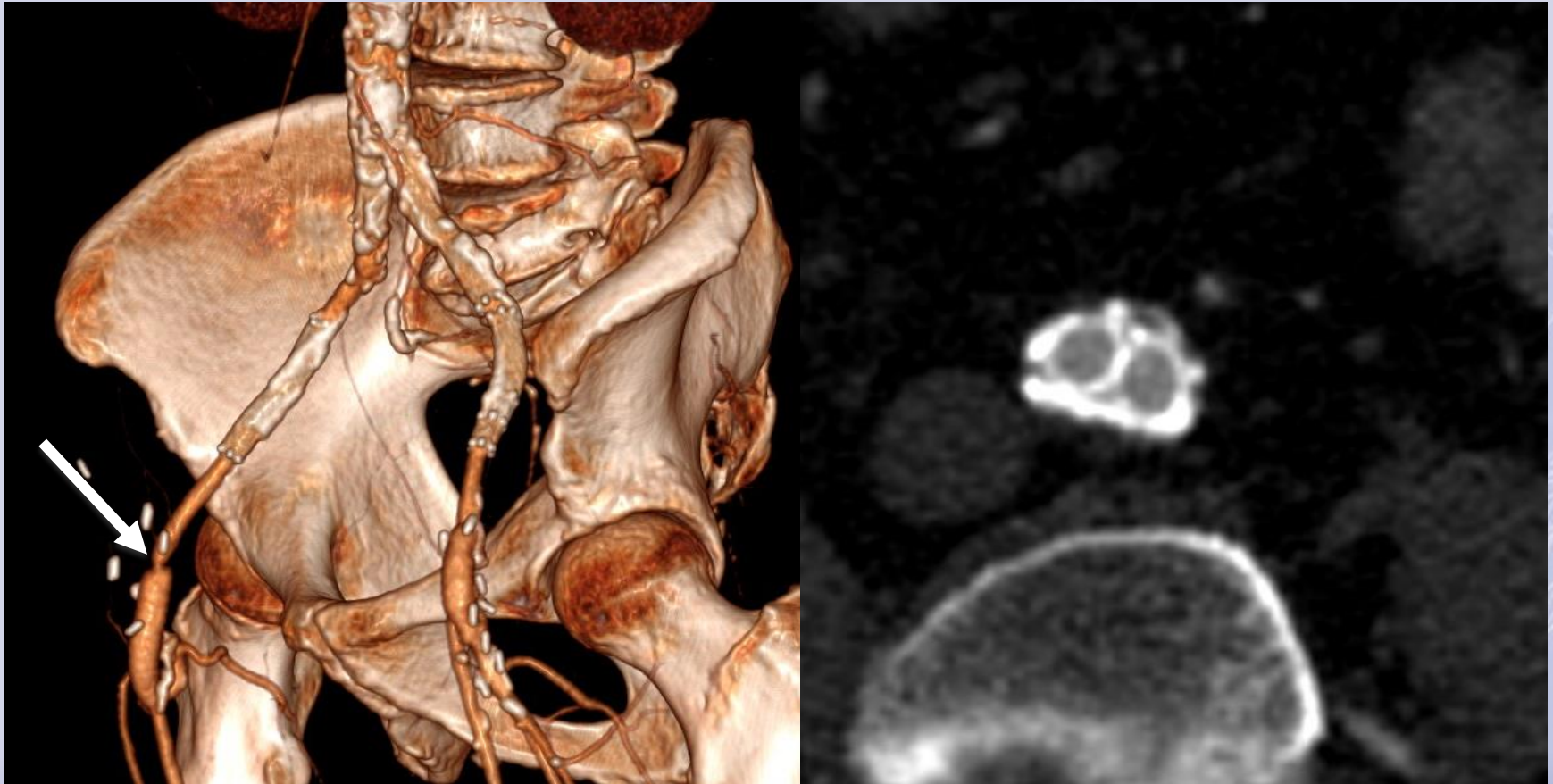
Lesions at risk (n)
36 33 25 22 17 12 8 6



Limbs at risk (n)
28 25 20 16 12 7 4 2

Hostile Groins + Kissing Stents

THE SOCIETY OF VASCULAR MEDICINE & SURGERY
CONTROVERSIES & UPDATES
IN VASCULAR SURGERY
JANUARY 22-24 2015
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Transobturator Allograft Bypass

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Limits

- Material **DIAMETER**
- Material **LENGHT** / Patient's Height
 - 150cm Catheters
 - Balloons/Stents 180cm
- No **RESCUE** device
- Higher **COST**

Cost

Material	Femoral approach	Cost	Radial Approach	Cost
Puncture	Surflo 18G Terumo	3,64	Microp 21G Cook	29,90
Sheaths	6F court Terumo	12,86	6F court Terumo 6F long 110 cm Cook	12,86 161,70
Guidewires	180 cm droit Terumo	24,51	260 cm droit Terumo 260 cm Amplatz 400 cm Plywire	36,47 35,88 141,40
Catheters	Vertébrale 100 Cook	16,98	C2 100 Cook Vertébrale 135 Cook	14,35 53,22
Balloons	Fox Abbott 6x40	70,56	Pacific Invatec 6x40	125,60
Stents	Lifestent Bard 7x40 Reinbursement	633,00 - 841,52	Sinus-518 Optimed 7x40 Reinbursement	664,65 - 841,52
Manometer	Merit medical	25,12	Merit medical	25,12
Closure	Femoseal	131,60	TR Band	10,76
Total	Femoral	76,75	Radial	470,39

Extra-Cost Transradial Access = 393,64 €

Conclusions

- **FEASIBLE** but **NOT MATURE**
- **ALTERNATIVE** to Humeral access
- Patient **SELECTION** is paramount
 - Arch
 - Height
 - Simple lesions
- Material **IMPROVEMENT** is needed

**It's just an issue of
length and diameter...**





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