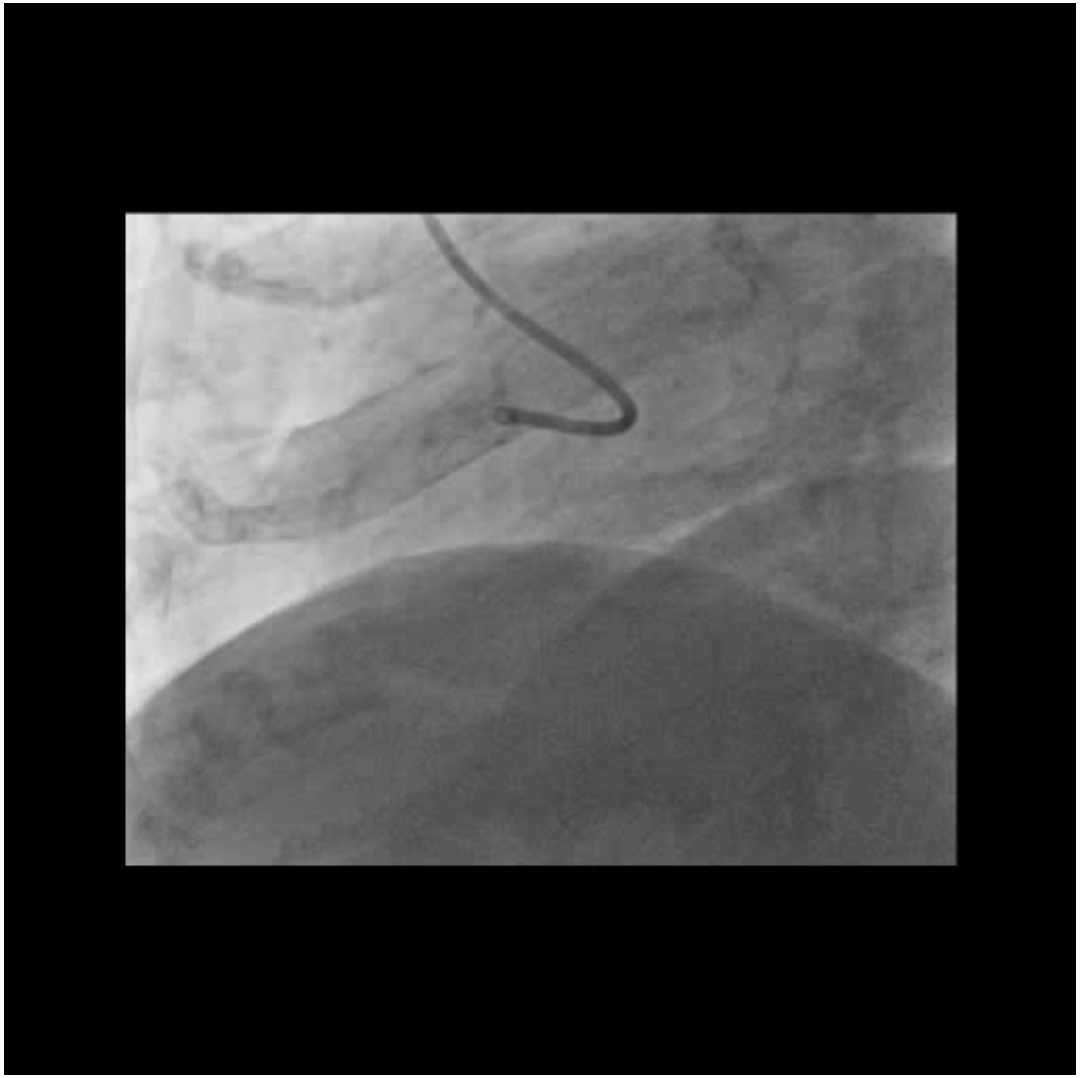
Quels types de patients et de lésions ne sont pas traités de façon optimale?

J BERLAND
Clinique Saint Hilaire
ROUEN

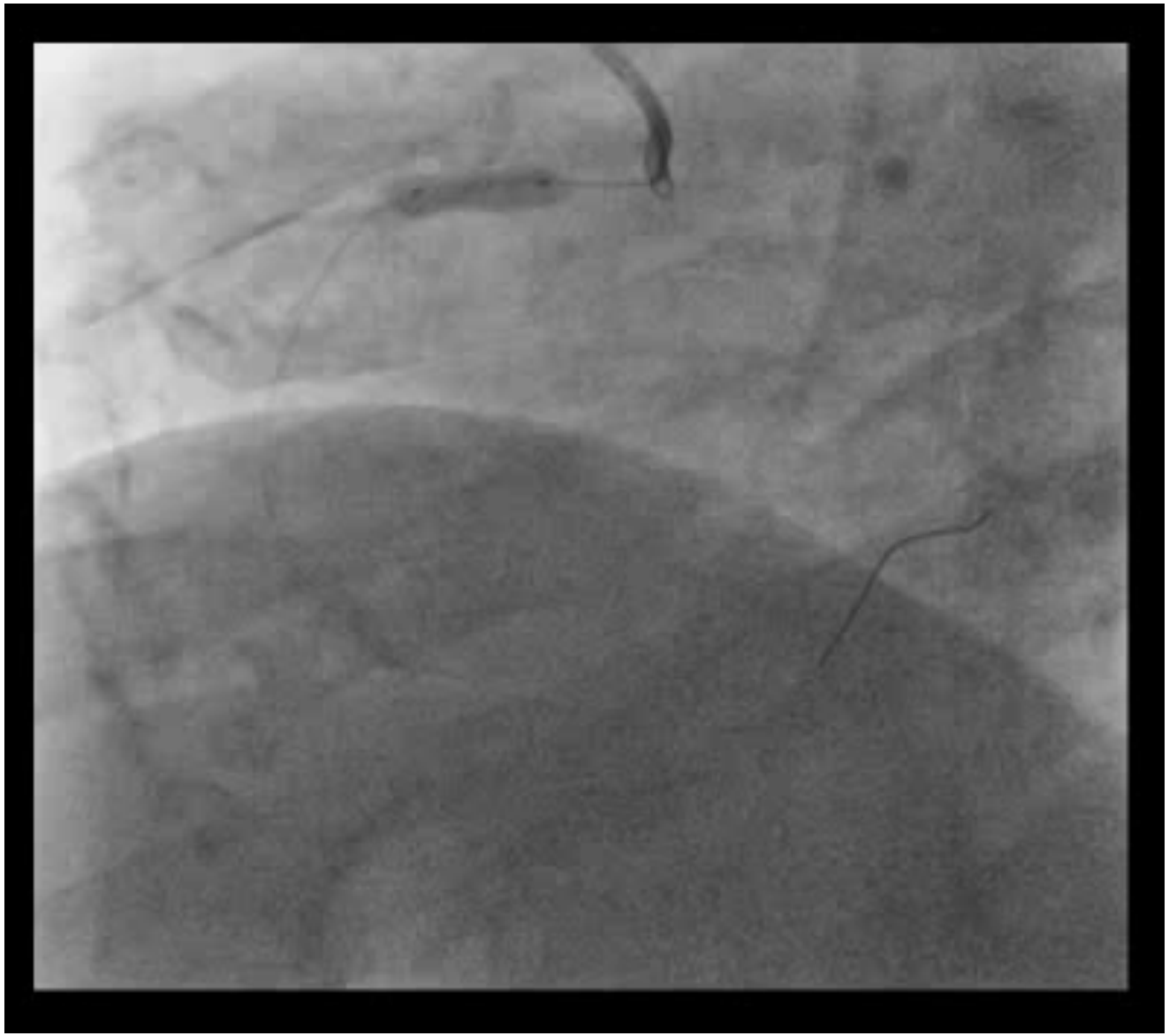
Absence de conflit d'intérêt

Mr V 67 ans
2008:Ostium CD:Stent Nu 3.5 x 18 mm 22 ATM



Fraise 1.5 mm

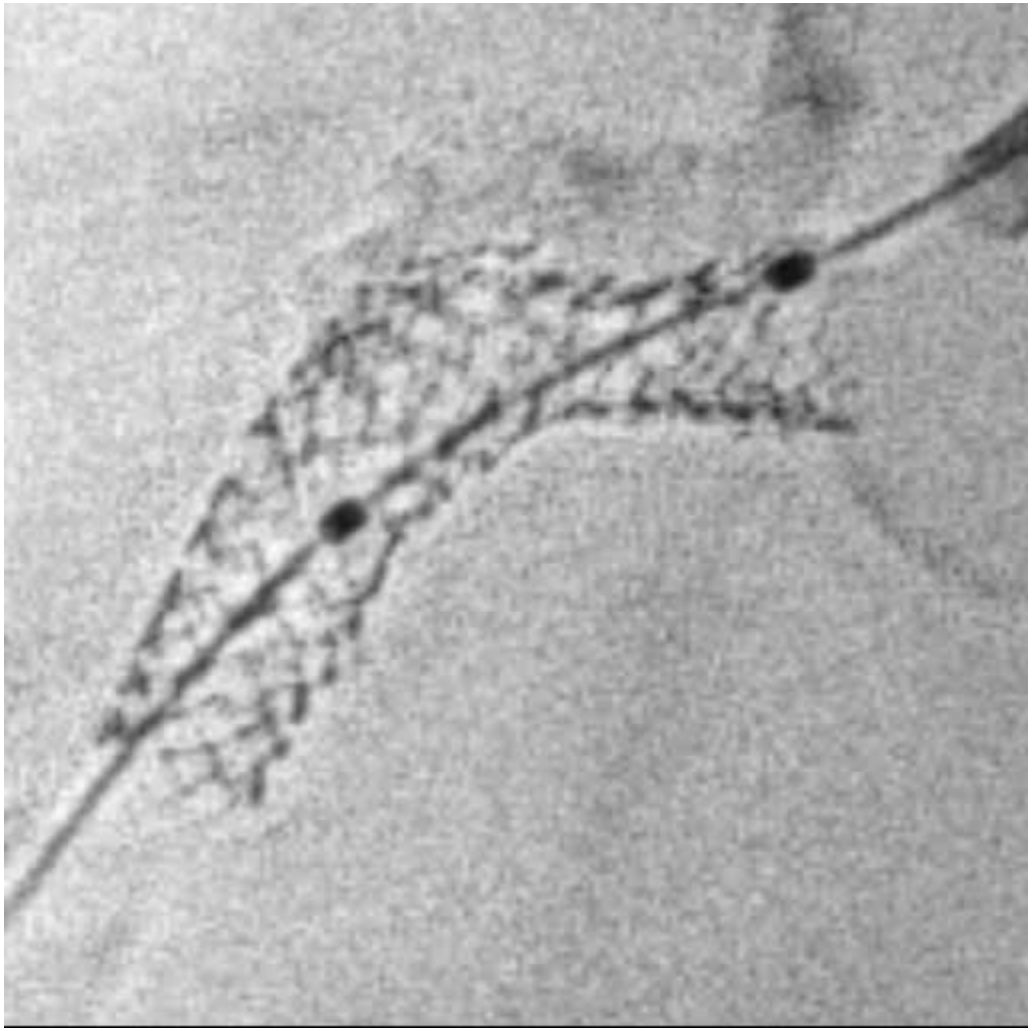
Ballon NC 4 x 12 mm 26 Atm



Positionnement d'un PROMUS 3.5 x 20 mm 20 Atm

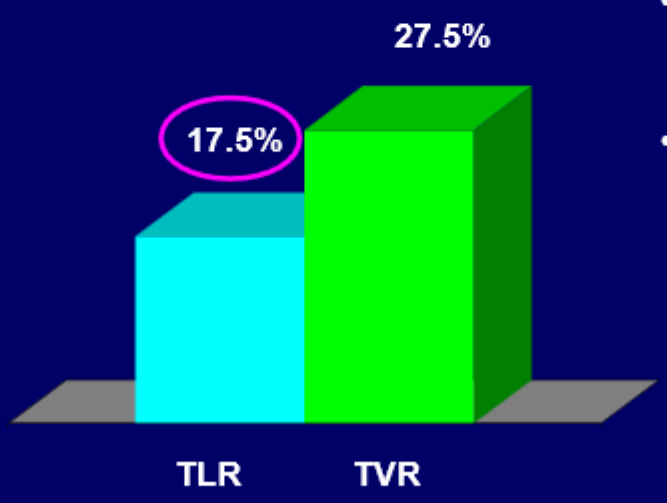
Résultat angio final

Résultat après impaction par ballon NC à 26 Atm



Cypher in Aorto-ostial lesions*

(40 pts, 45 lesions, 49 stents)
Mean FU:18±8 months



- **Binary restenosis 22.5%**
- Late loss: 0.77± 0.54

* Angio (at 8 months) FU available in 78% of the patients

Iakovou , Colombo
Eur J Cardio 2004,25,14

DES FOR OSTIAL LESION

RESEARCH STUDY

Independent Predictors of In Segment Restenosis in 441 Lesions Treated in 238 Patients

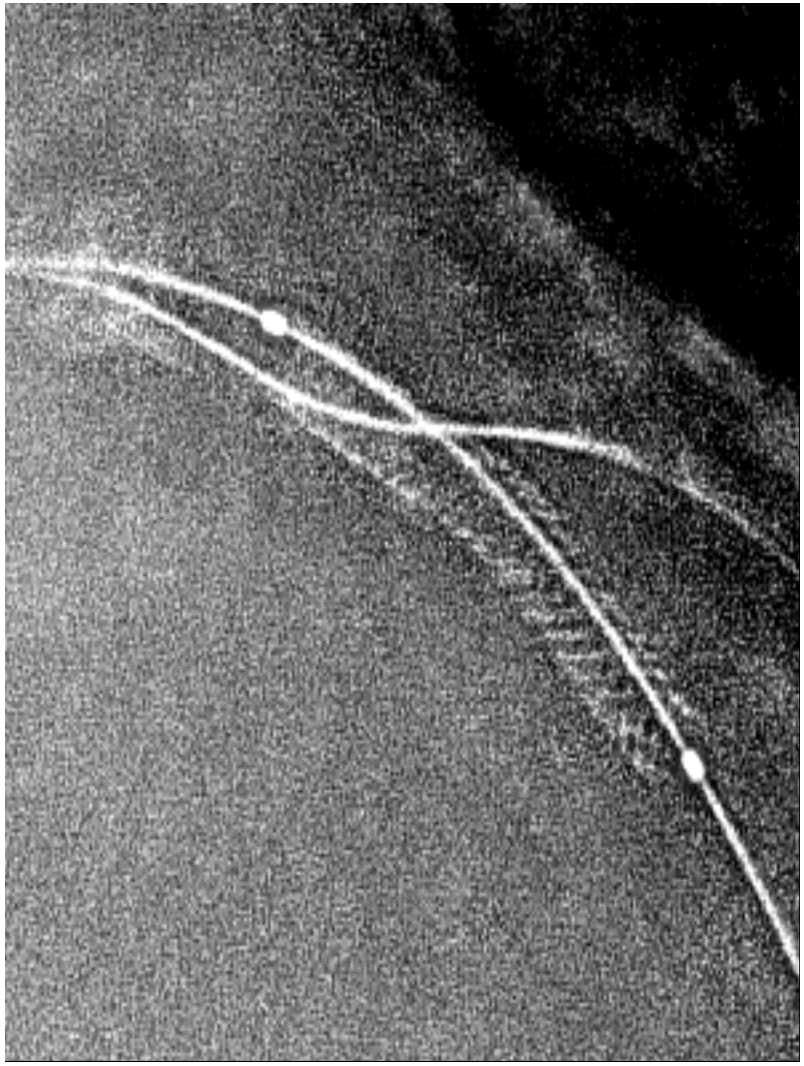
	OR	95% CI	*P*
Treatment of in-stent restenosis	4.16	1.63–11.01	<0.01
Ostial location	4.84	1.81–12.07	<0.01
Diabetes mellitus	2.63	1.14–6.31	0.02
Total stented length(per 10-mm increase)	1.42	1.21–1.68	<0.01
Reference diameter (per 1.0-mm increase)	0.46	0.24–0.87	0.03
Left anterior descending artery	0.30	0.10–0.69	<0.01

P. Lemos et al, Circulation 2004, 109(11) 1366

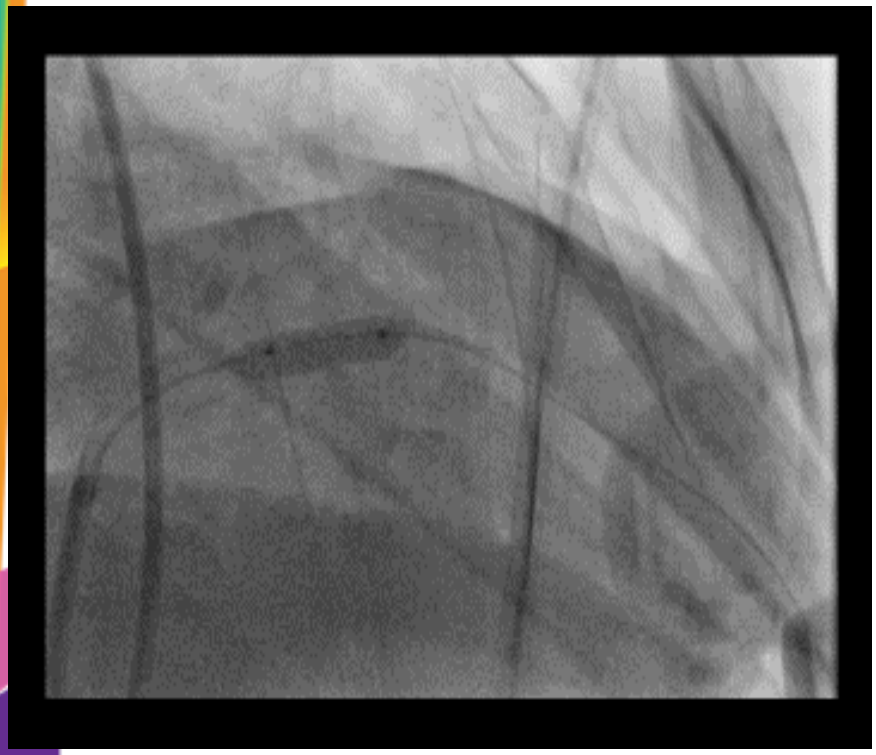
HOSPITAL CARDIOLÓGICO COSTANTINI

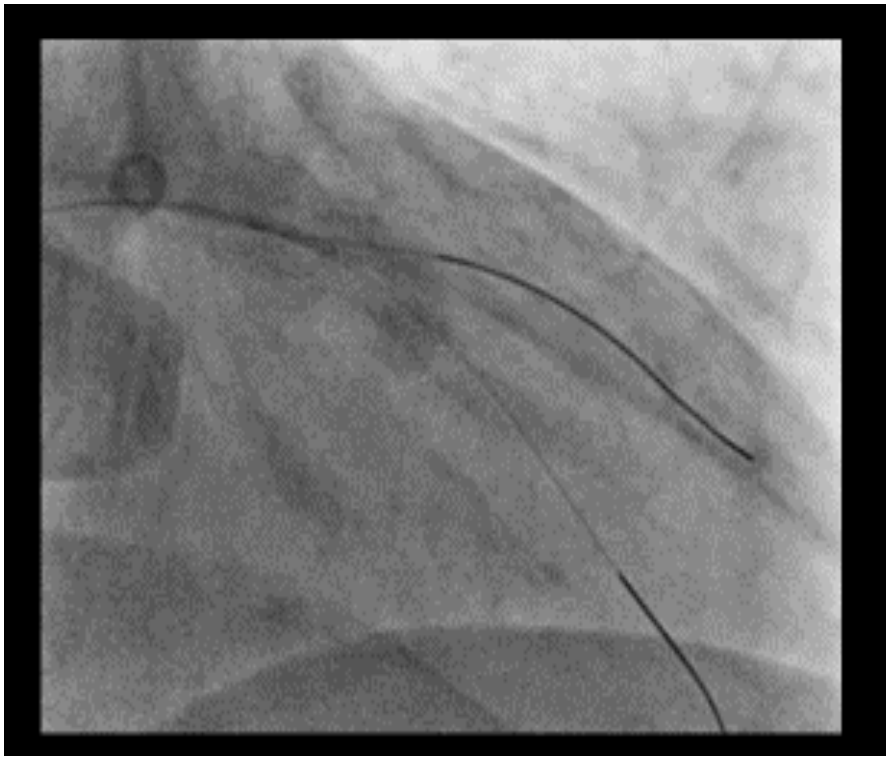
Mr B 51 ans:
2007 Infarctus post stent Cx
2014 angor invalidant

Après Prédilatation, Implantation d'unPROMUS 2.75 x24 mm

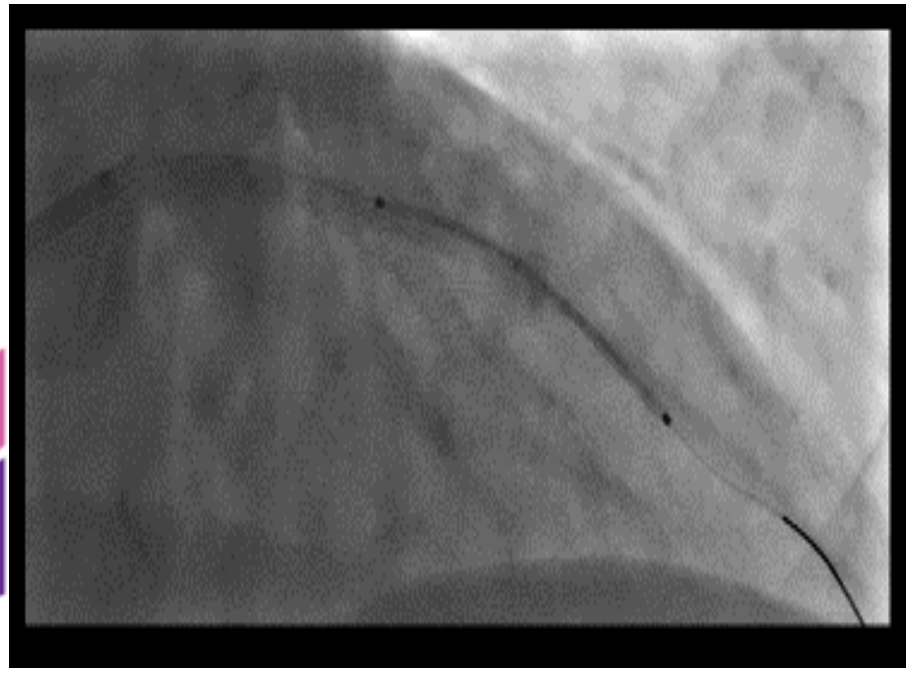


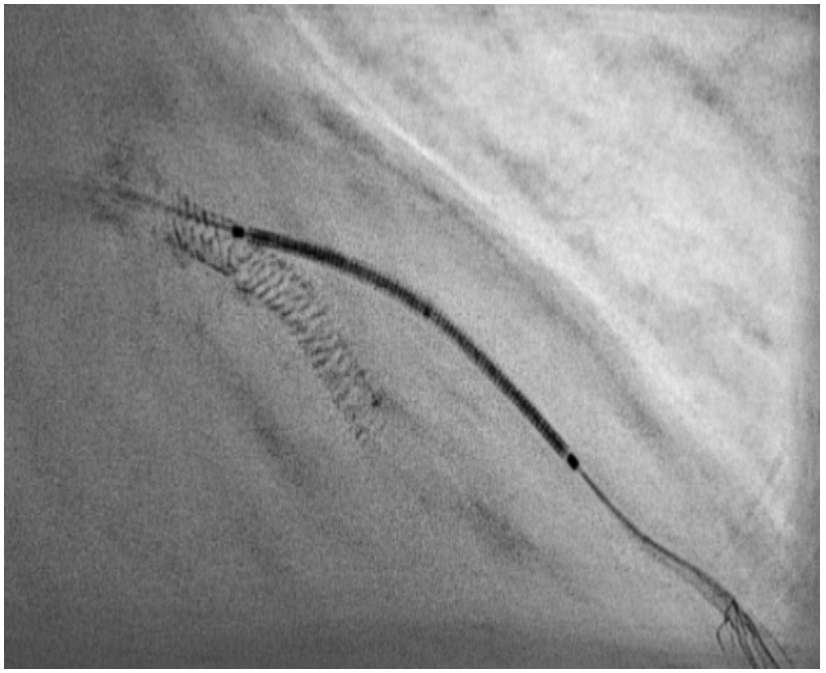
POT puis refranchissement des mailles du stent



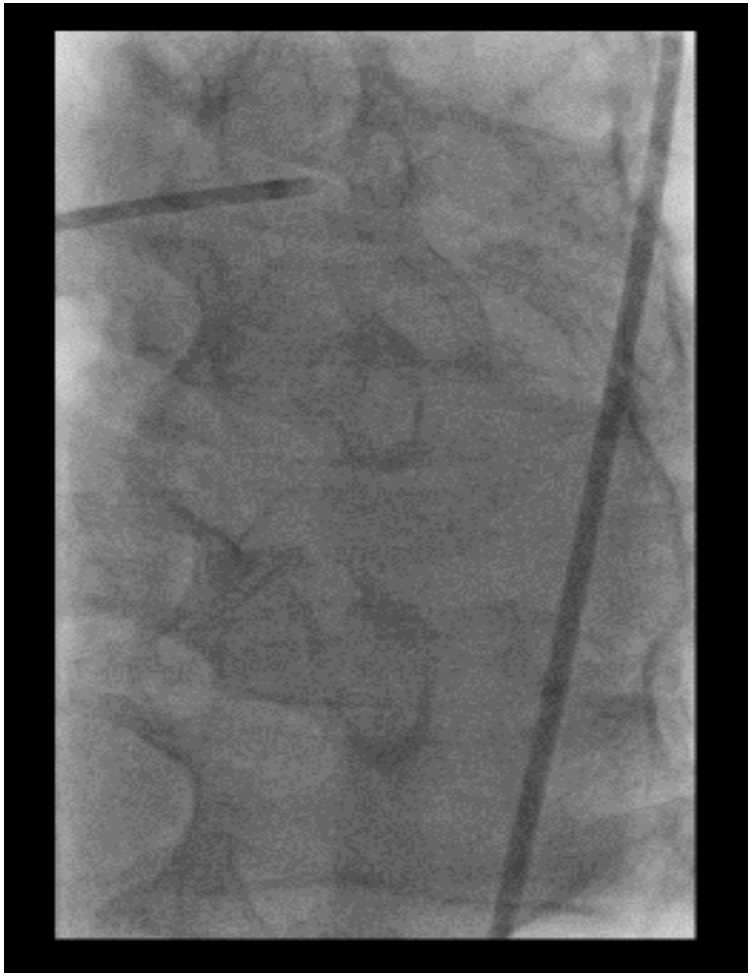


Après repositionnement d'un guide dans le vrai chenal mise en place d'un Promus Premier 2.25 x 32 mm





Résultat final:
CPK 375 Tropo us 7 ui



Clinical consequences of Side Branch Occlusion (TIMI 0/1)

- SBO after PCI of bifurcation lesions is common (~ 7-20%) and is associated with increased incidence of non-Q wave MI. Poerner T et al. Circ 2001; Blankenship J. et al, JACC 2001 CY Cho et al, CCI 2001

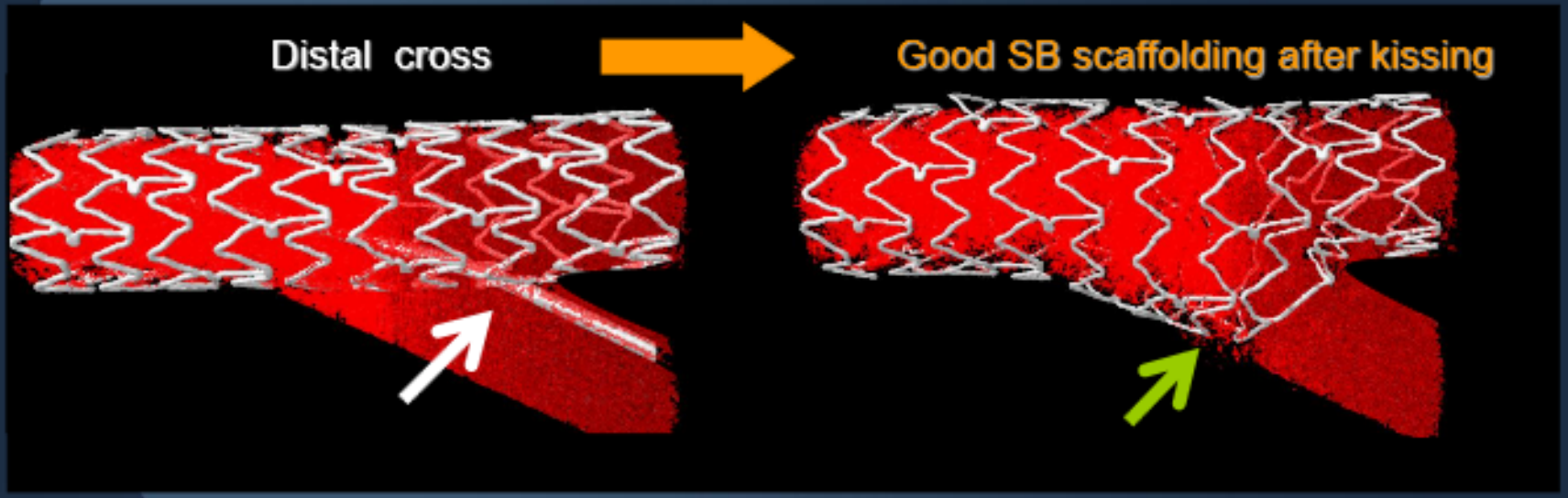
- SBO occurred in 8.4% of 2227 pts with bifurcation lesions (SB>2.3mm) and predicted cardiac death/MI (HR 2.34; 95% CI 1.15-4.77; p=0.02)

Hahn JY et al. JACC 2013

Why Protect SB's from Closure?

- Occlusion of SB's >1mm associated with 14% incidence of myocardial infarction
  - Arora RR et al. *Cathet Cardiovasc Diagn* 1989;18:210-2
- SB closure associated with large periprocedural MI
  - Chaudhry EC et al. *J Thromb Thrombolysis* 2007

Wire should cross the MV into the SB through the distal strut



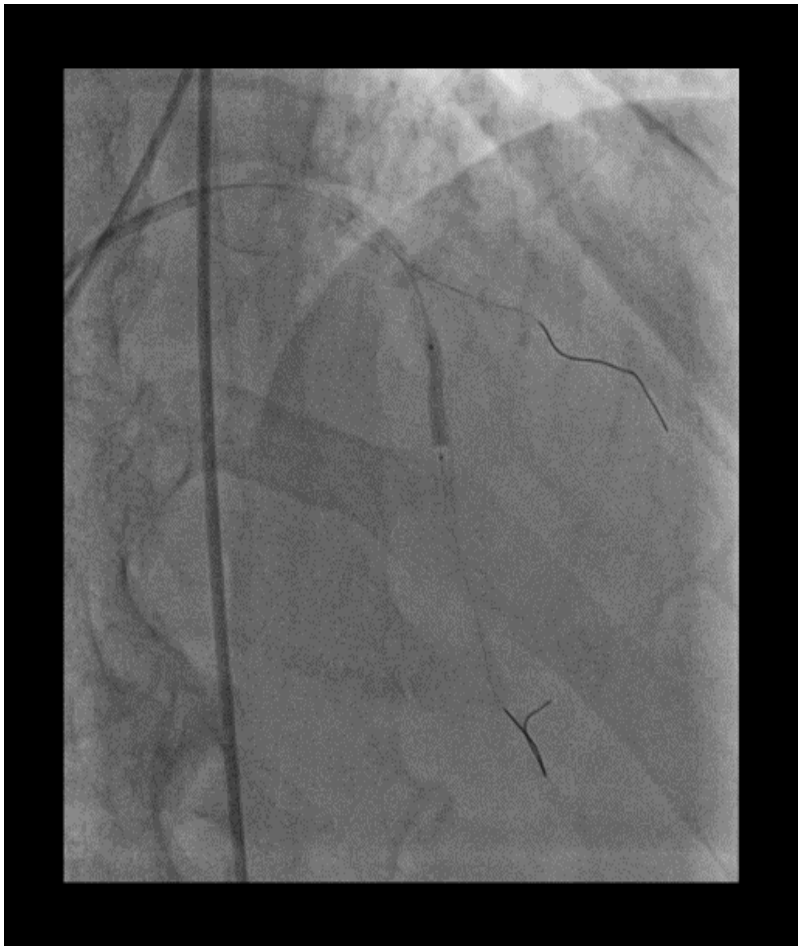
Recommendation: When rewiring a side branch, efforts should be made to cross the main vessel stent distally, thereby ensuring stent coverage of the ostium of the side branch

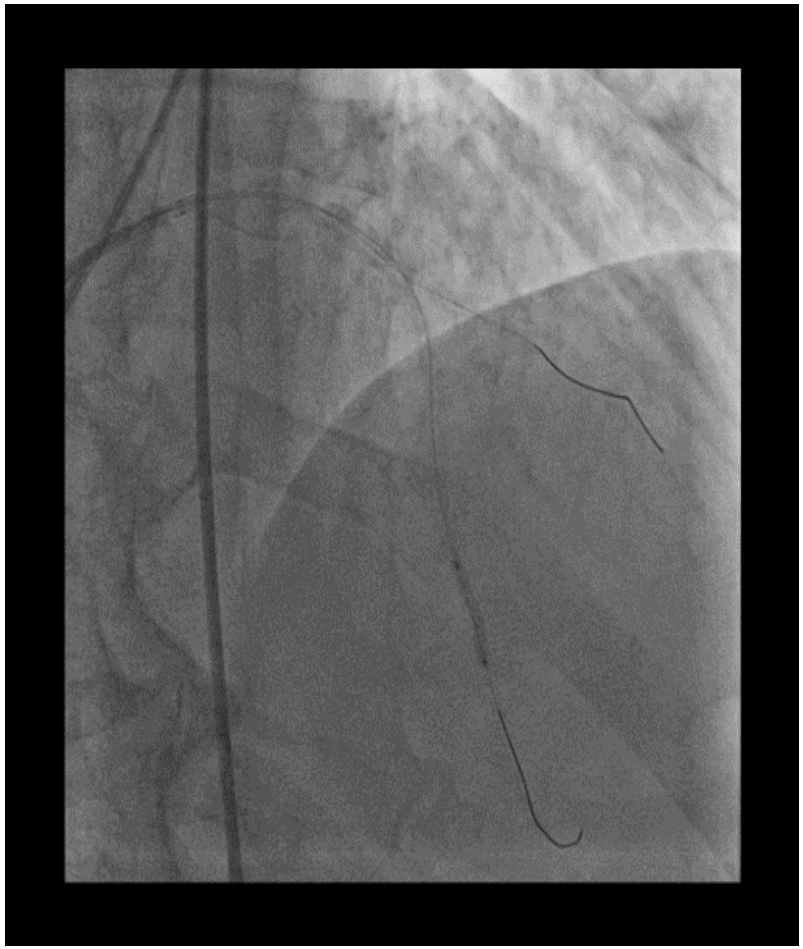
Consensus from 5th EBC meeting. EuroIntervention 2010;6(1):34-8

Mr E.67 ans
Décembre 2013

Diabète NID
Angor mixte invalidant
Tri tronculaire récusé
par les chirurgiens

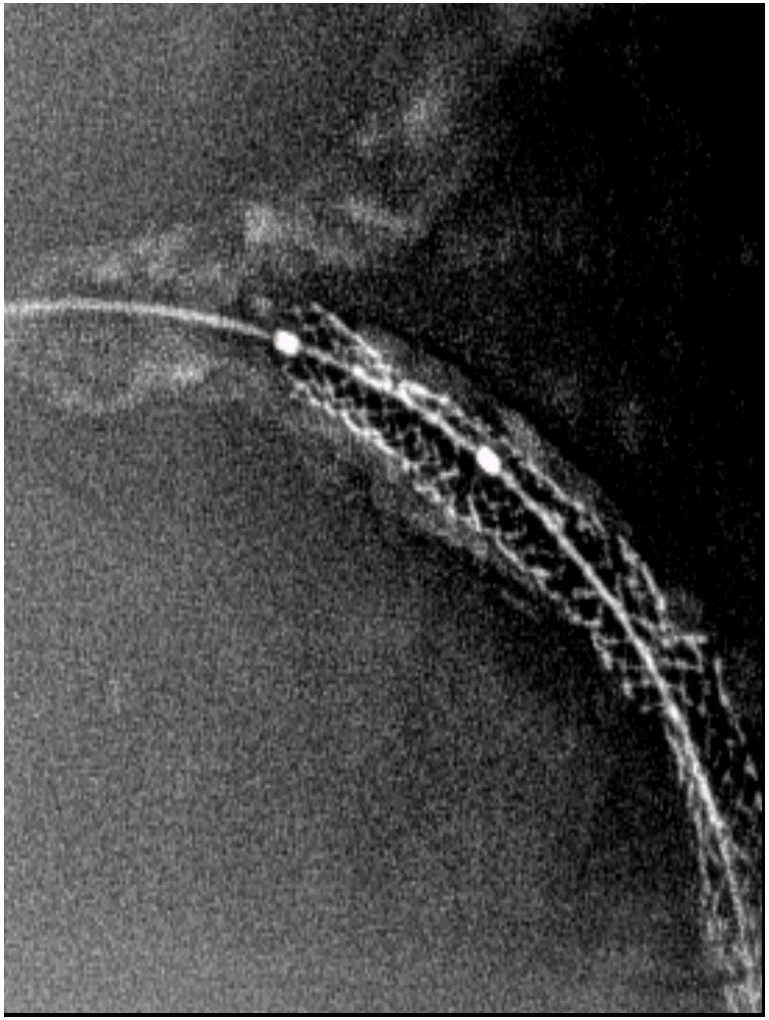
Multiples dilatations





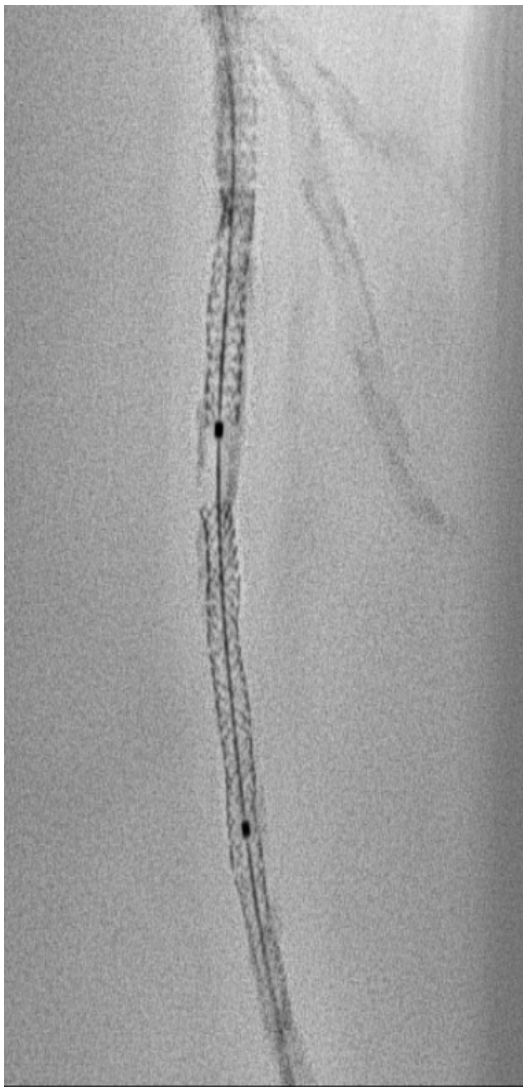
2 STENTS SYNERGY dans l'IVA moyenne

3 éme Synergy



Mr E.
Fin Avril 2014

Implantation de deux PROMUS en aval des trois SYNERGY



Résultat final
Occlusion distale de l'IVA

IMPACT OF CORONARY COMPLEXITY LESIONS ON DES OUTCOME IN PATIENTS WITH AND WITHOUT DIABET

Khedill,E;JACC 2014

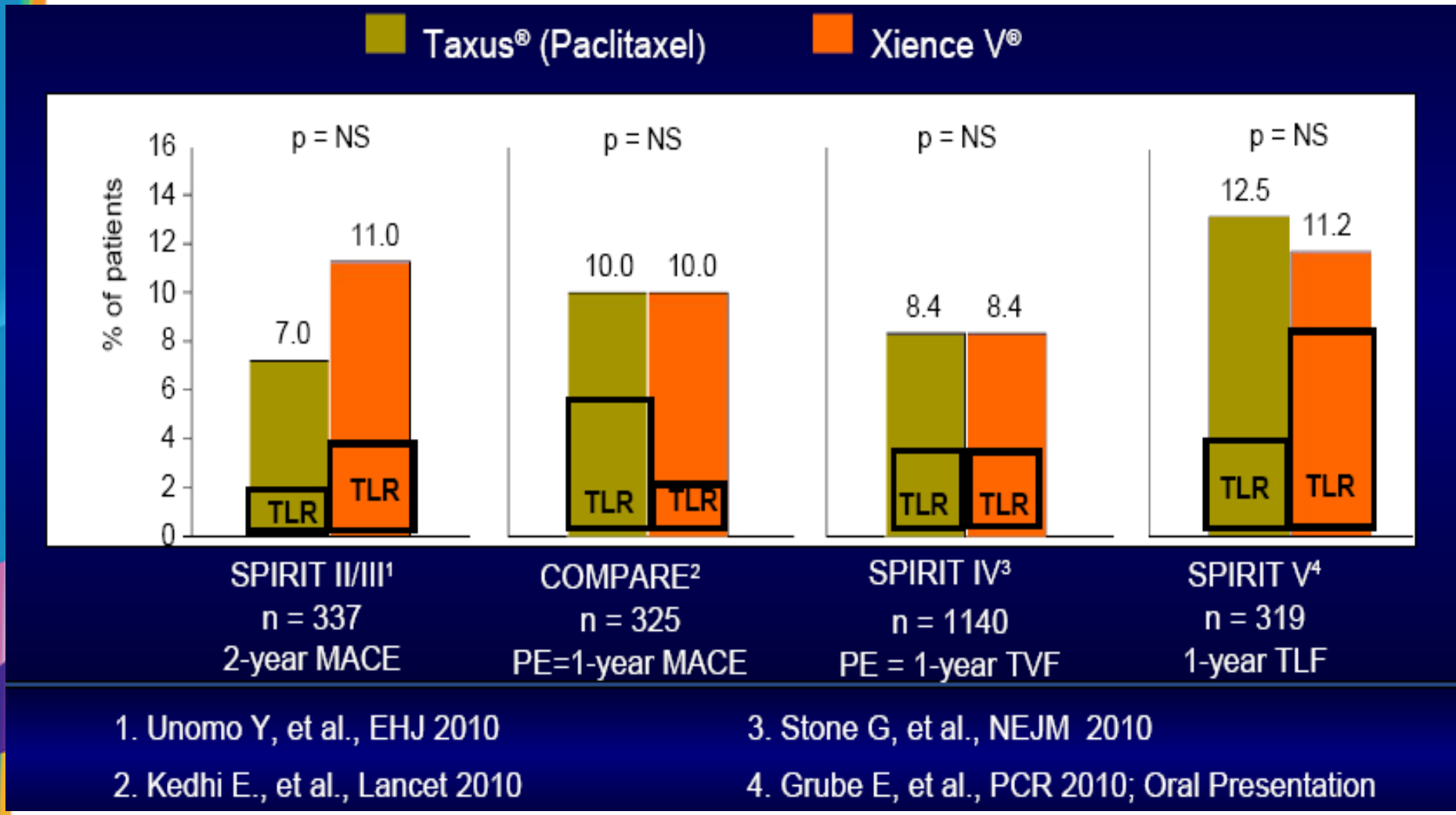
Table 1. Outcomes by Diabetes Status at 1 Year

	Diabetes (n = 3,167)	No Diabetes (n = 3,167)	Adjusted HR (95% CI)	*P* Value
TLR	6.8%	4.6%	1.34 (1.05-1.70)	0.02
TVR	9.4%	6.2%	1.40 (1.15-1.72)	0.001
Cardiac Death or MI	5.3%	3.8%	1.40 (1.09-1.81)	0.01
MACE	13.9%	9.4%	1.40 (1.19-1.65)	< 0.0001

Table 2. Diabetes vs. No Diabetes by ACC/AHA Lesion Type

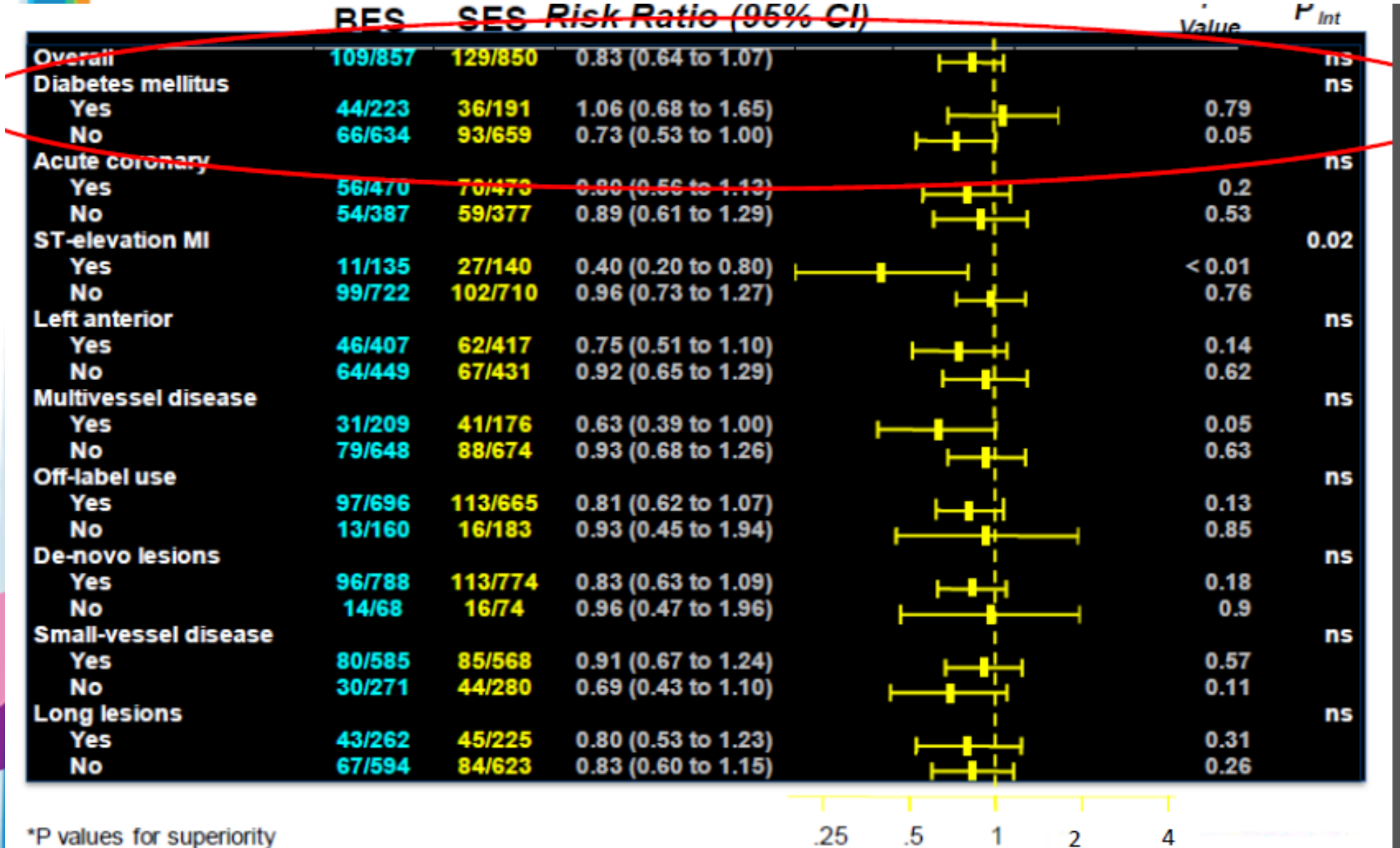
	HR	95% CI	*P* for Interaction
TLR *A/B1* *B2/C*	 0.96 1.80	 0.64-1.44 1.39-2.33	0.01
TVR *A/B1* *B2/C*	 1.13 1.81	 0.81-1.58 1.45-2.27	0.02
Cardiac Death or MI *A/B1* *B2/C*	 1.71 1.22	 1.00-2.93 0.93-1.60	0.28
MACE *A/B1* *B2/C*	 1.30 1.56	 0.97-1.73 1.31-1.86	0.28

EGALITE XIENCE TAXUS
Chez les Diabétiques

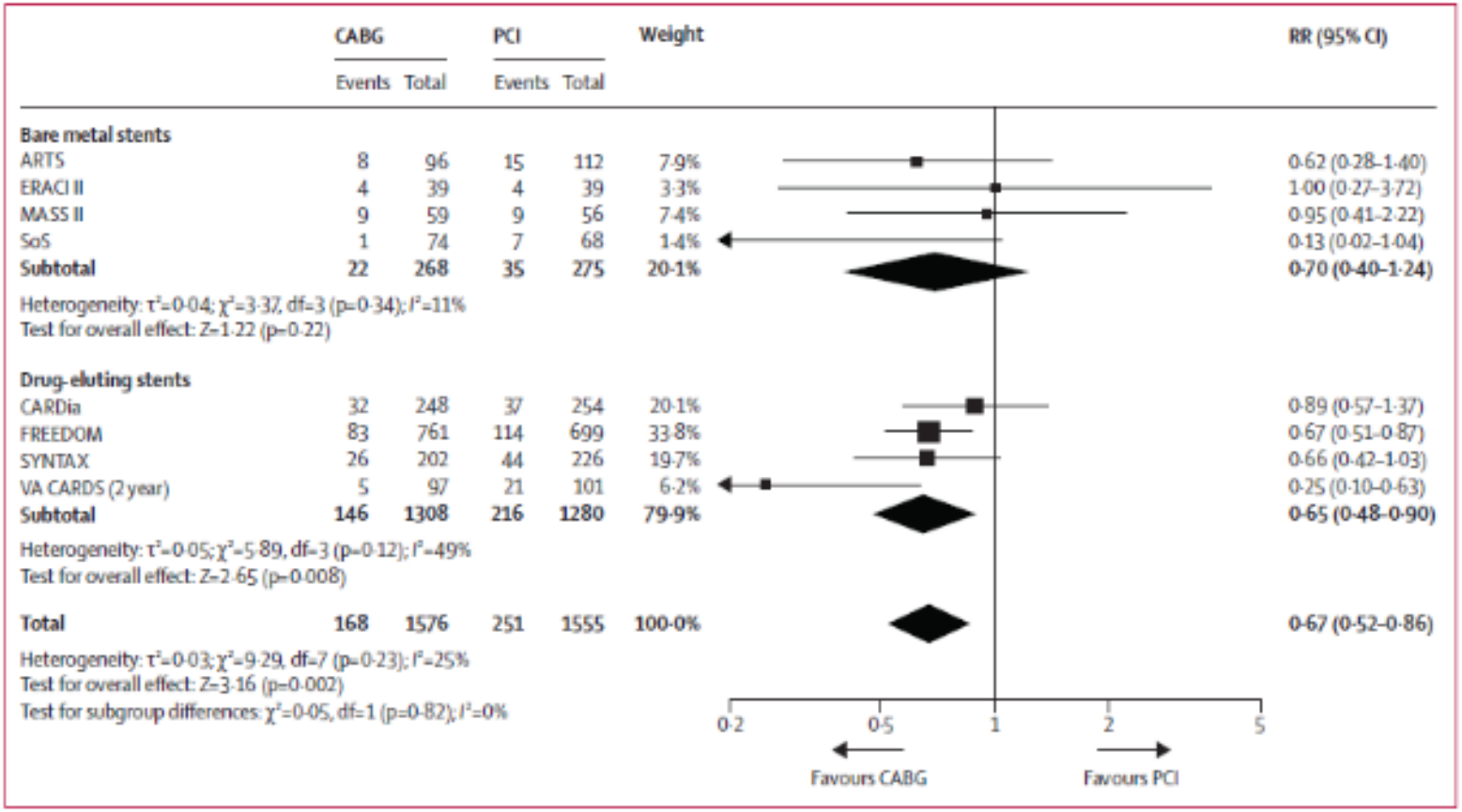


1. Unomo Y, et al., EHJ 2010
2. Kedhi E., et al., Lancet 2010
3. Stone G, et al., NEJM 2010
4. Grube E, et al., PCR 2010; Oral Presentation

Comparaison Biomatrix vs CYPHER Etude LEADERS



Comparison of coronary artery bypass surgery and percutaneous coronary intervention in patients with diabetes: a meta-analysis of randomised controlled trials



Verma et al. Lancet Diabetes – endocrinology 2013

Lésions non traitées de façon optimale?

- Lésions complexes chez le patient diabétique.
- Bifurcations: rôle du stent dédié ?
- Lésions aorto-ostiales calcifiées.

Impact of Coronary Lesion Complexity on DES Outcomes in Patients with and Without Diabetes

Data from 18 RCTs of DES were used to perform analysis of 3,167 propensity score-matched pairs.

- **At 1 year, diabetes independently predicted higher risks of repeat revascularization, cardiac death/MI, and MACE**
- **Diabetic patients with ACC/AHA type B2/C lesions had higher rates of TLR and TVR, but those with type A/B1 lesions did not (*P* for interaction = 0.01 and 0.02, respectively)**
- **Rates of cardiac death/MI and MACE were higher across the board for diabetic patients than for nondiabetic patients**

Implications: Concerns about repeat revascularization should not deter use of DES in diabetic patients with relatively simple lesions.

Kedhi E, et al. *J Am Coll Cardiol.* 2014; Epub ahead of print.