



INSTITUT
CARDIOVASCULAIRE
PARIS
SUD

Générale
de santé
HÔPITAL PRIVÉ
JACQUES CARTIER

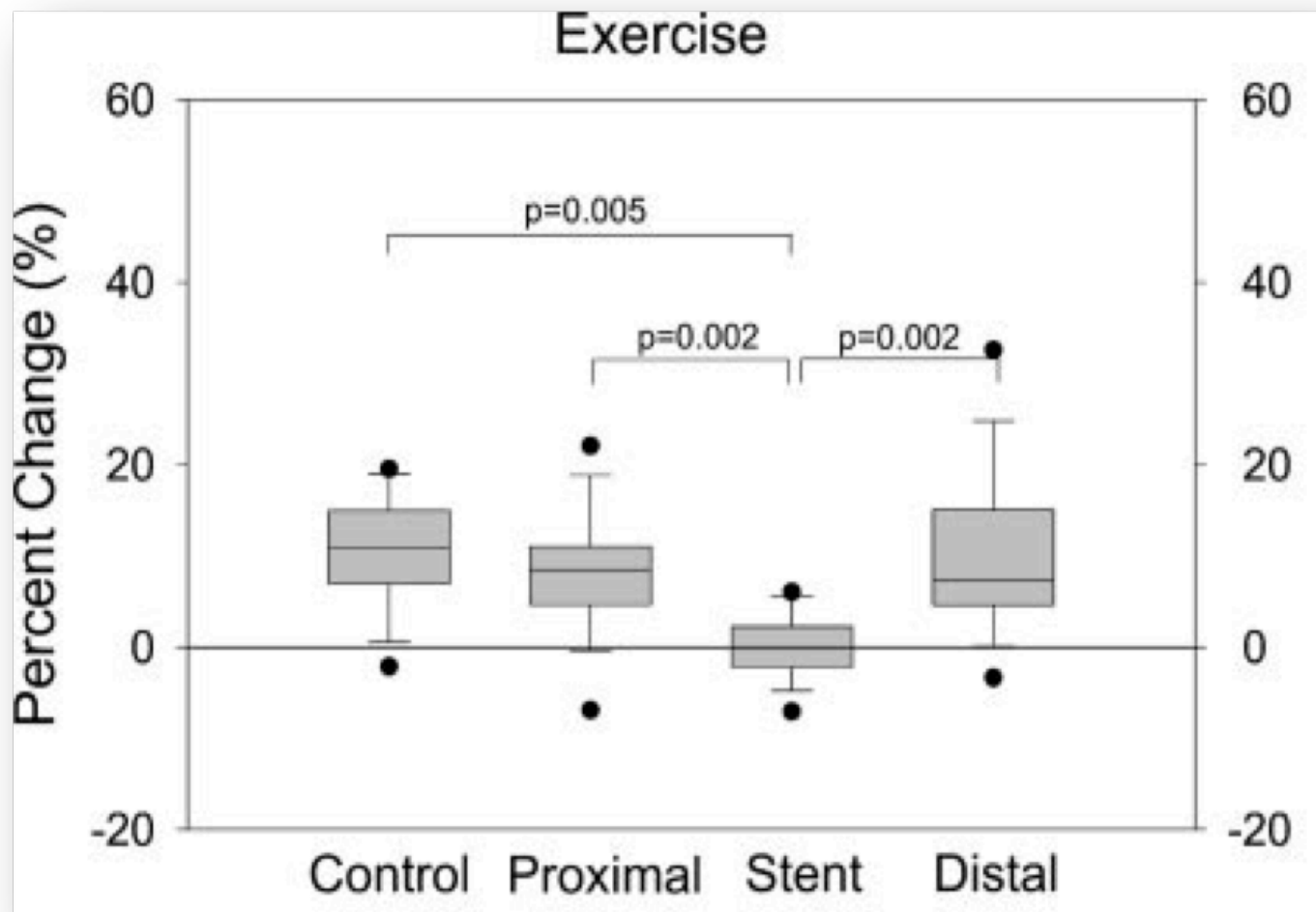
Pourquoi J'adhère ?

T. Lefèvre

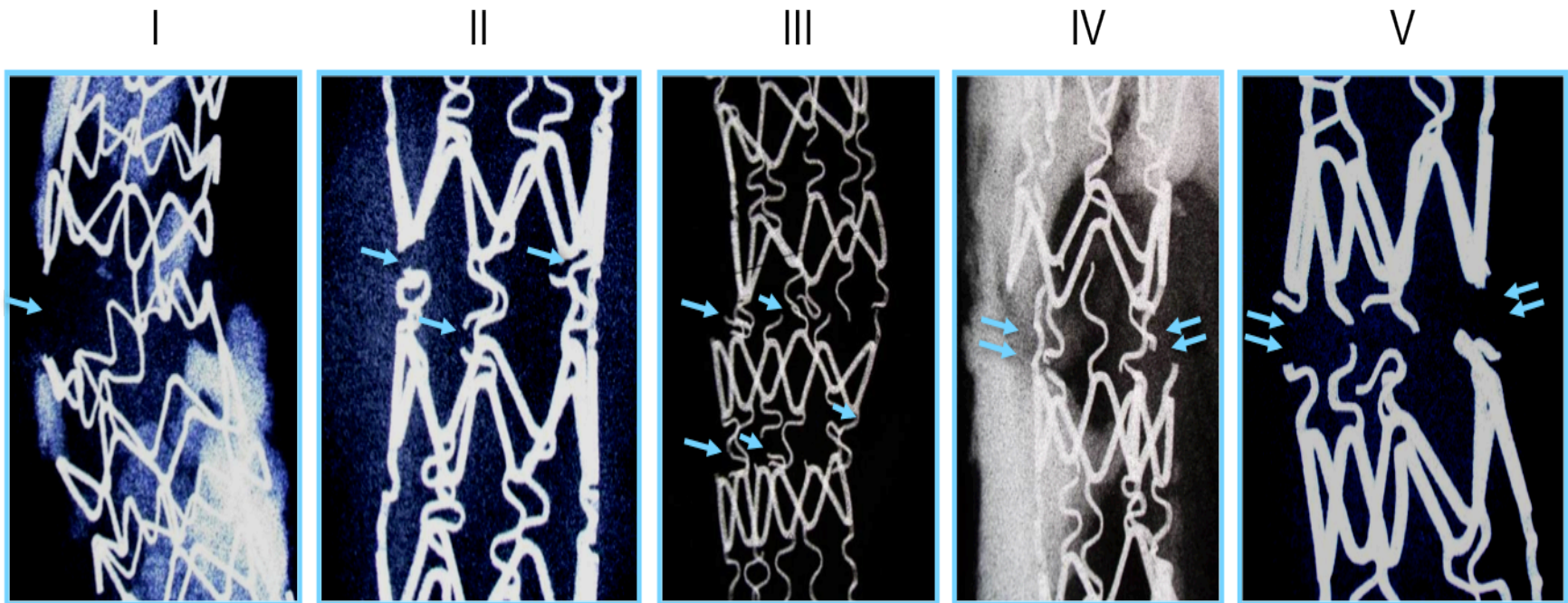
Top 5:

La permanence du stent actif est inutile voire délétère à long terme

Notion de “Caging”



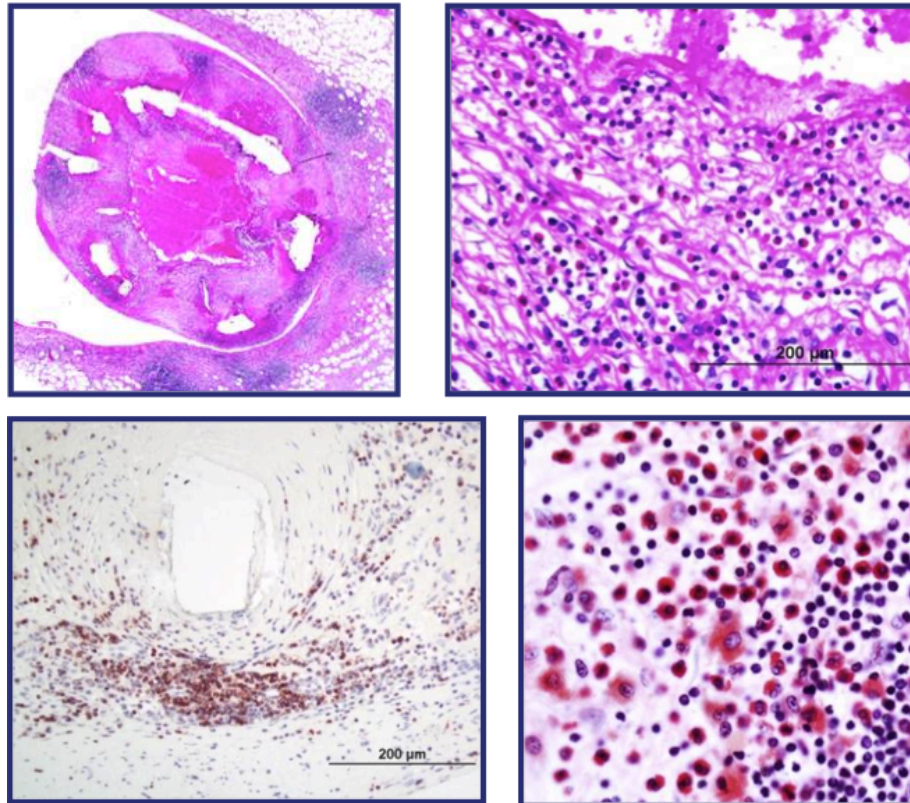
Stent métallique et risque de fracture



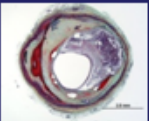

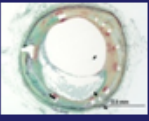
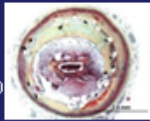
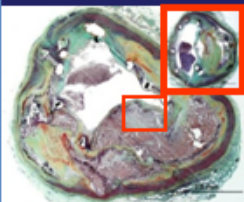
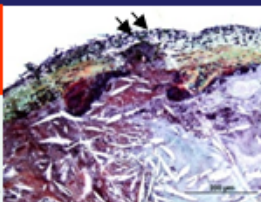
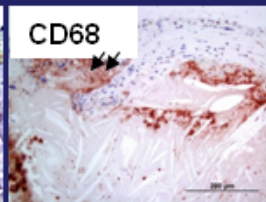
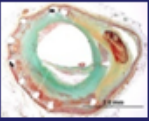

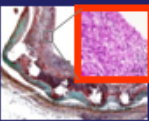
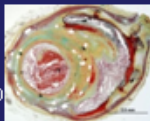
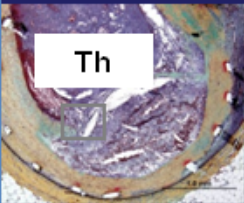
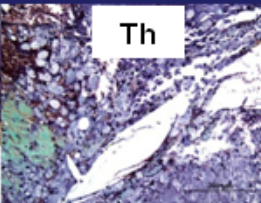
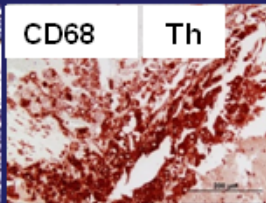
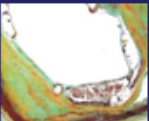
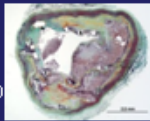
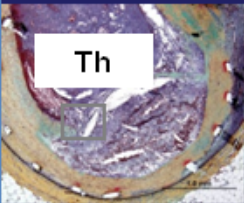
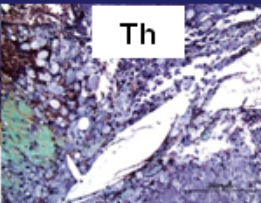
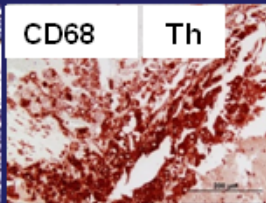
200 DES dans le the CVPPath registry:
Fracture observée dans 40% des cas (SES 32, PES 19)
Fracture grade 5 dans 9 cas (SES 6, PES 3)

Stent métallique, malapposition tardive et réaction allergique

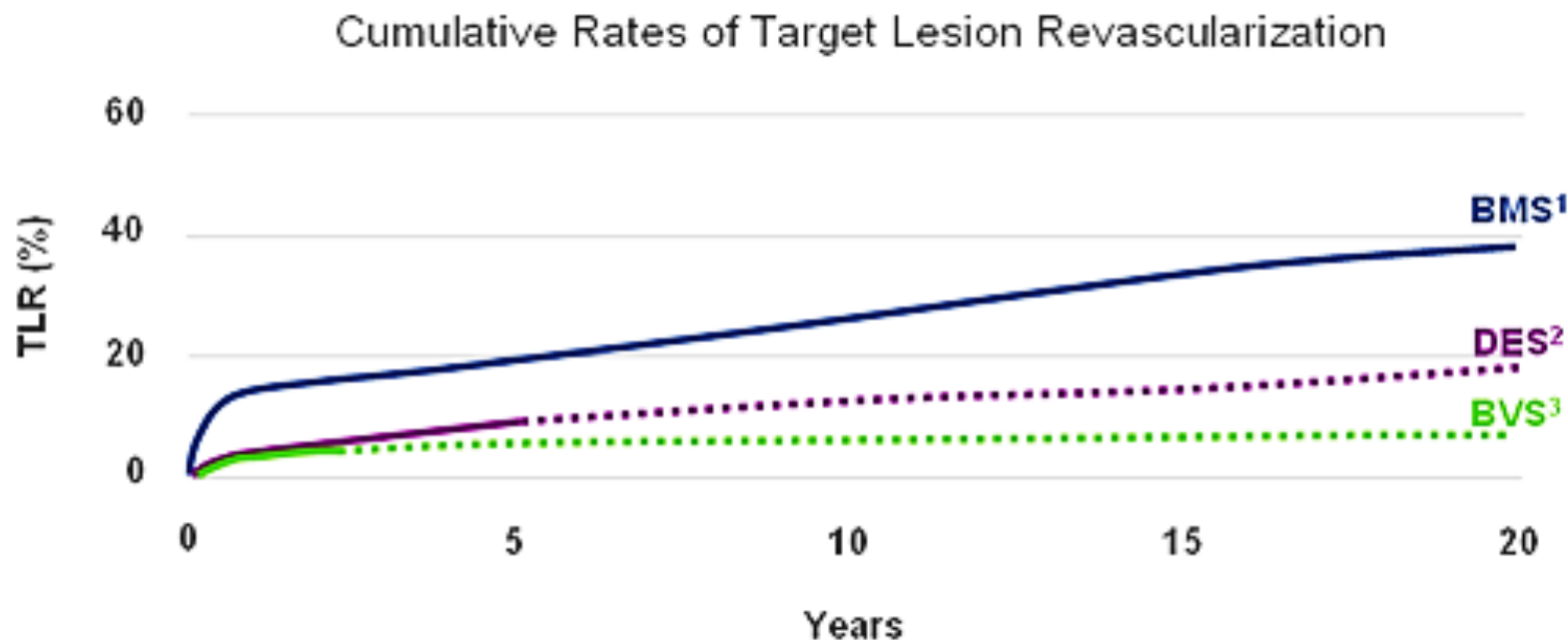
IVA: SES (17mois)



Stent métallique et évènements tardifs

Thin-cap Fibroatheroma (TCFA)		Plaque Rupture (PR)		PES (14 months)	
<p>58 M BMS (NIR) 61 months LAD prox Non-cardiac death</p> 	<p>43 M BMS (Mini-Crown) 84 months LAD prox Stent related death (thrombosis)</p> 	<p>63 M BMS (Multi-Link) 98 months RCA mid Non-stent related cardiac death</p> 	<p>87 F BMS (AVE) 61 months RCA prox Stent related death (thrombosis)</p> 		<p>SES (23 months)</p>   
<p>73 M BMS (Bx Velocity) 50 months R1 prox Non-cardiac death</p> 	<p>47 M BMS (GR II) 96 months RCA prox Stent related death (thrombosis)</p> 	<p>40 F DES (SES) 17 months RCA prox Stent related thrombosis secondary to hypersensitivity</p> 	<p>43 M BMS (ML ZETA) 61 months RCA prox-dist Stent related death (thrombosis)</p> 	<p>BMS (96 months)</p>   	
<p>67 M DES (SES) 13 months RCA prox Non-stent related cardiac death</p> 	<p>59 M DES (SES) 23 months RCA dist Stent related death (thrombosis)</p> 	<p>Th</p> 	<p>Th</p> 		<p>CD68</p> 

Obtenir les bénéfices initiaux d'un bon DES sans les inconvénients tardifs



*Adapted from Yamaji et al. Circ Cardiovasc Interv 2010; 3: 468-75
Adapted from Stone GW et al., TCT 2011
Data on file at Abbott Vascular (ABSORB Cohort B and Extend)*

Top 4:

Le BVS Absorb fait aussi bien qu'un bon
DES sur des lésions sélectionnées

ABSORB Cohort B

Non-Hierarchical	30 Days	1 Year	2 Years	3 Years	4 Years
	N = 101	N = 101	N = 100*	N = 100*	N = 99*
Cardiac Death %	0	0	0	0	0
Myocardial Infarction %	2.0	3.0	3.0	3.0	3.0
Q-wave MI	0	0	0	0	0
Non Q-wave MI	2.0	3.0	3.0	3.0	3.0
Ischemia driven TLR %	0	4.0	6.0	7.0	7.1
CABG	0	0	0	0	0
PCI	0	4.0	6.0	7.0	7.1
Hierarchical MACE %	2.0	6.9	9.0	10.0	10.1
Hierarchical TVF %	2.0	6.9	11.0	13.0	13.1

Pas de MACE supplémentaire entre 4 et 5 ans

Pas de thrombose (ARC ou Protocol)

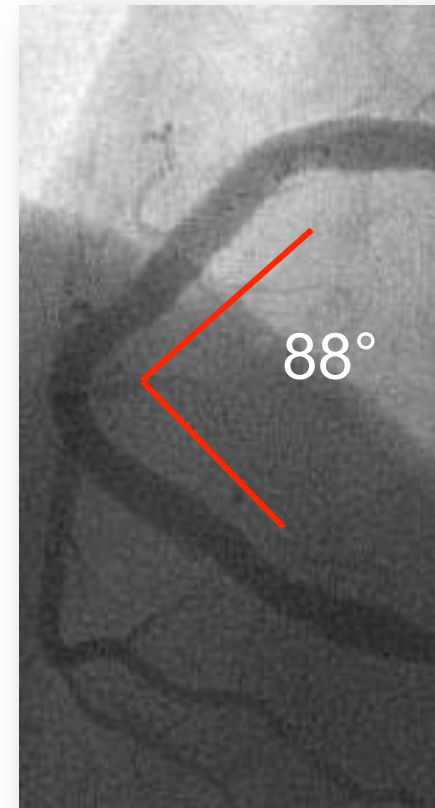
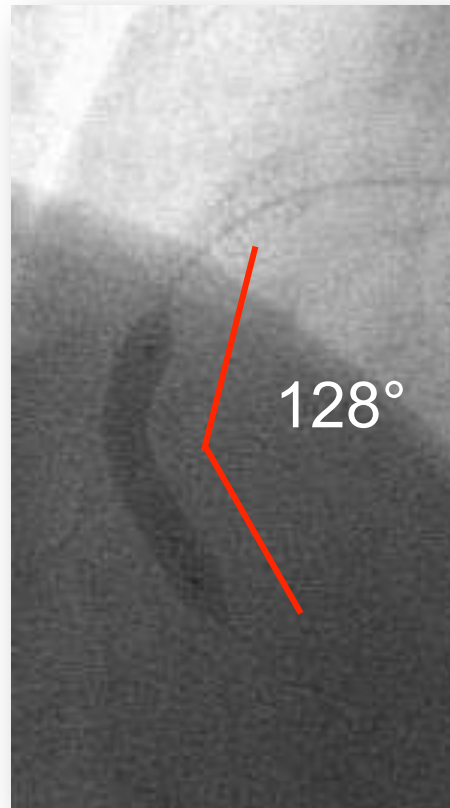
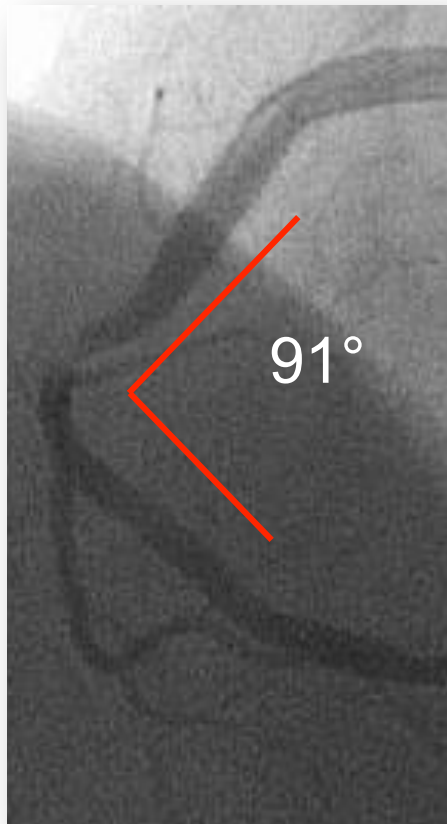
ABSORB II à 1 an

	Absorb (N=335 patients)	XIENCE (N=166 patients)	P-value
DoCE (Device-Oriented Composite Endpoint)	4.8	3.0	0.35
Cardiac Death (%)	0	0	1.00
Target Vessel MI (%)	4.2	1.2	0.07
Clinically Indicated TLR (%)	1.2	1.8	0.69
All TLR (%)	1.2	1.8	0.69
Definite Scaffold/Stent Thrombosis (%)	0.6	0.0	1.00
PoCE (Patient-Oriented Composite Endpoint)	7.3	9.1	0.47
All Death (%)	0	0.6	0.33
All MI (%)	4.5	1.2	0.06
All NQMI (%)	3.9	1.2	0.16
All QMI (%)	0.6	0	1.00
All Revascularizations (%)	3.6	7.3	0.08

Top 3:

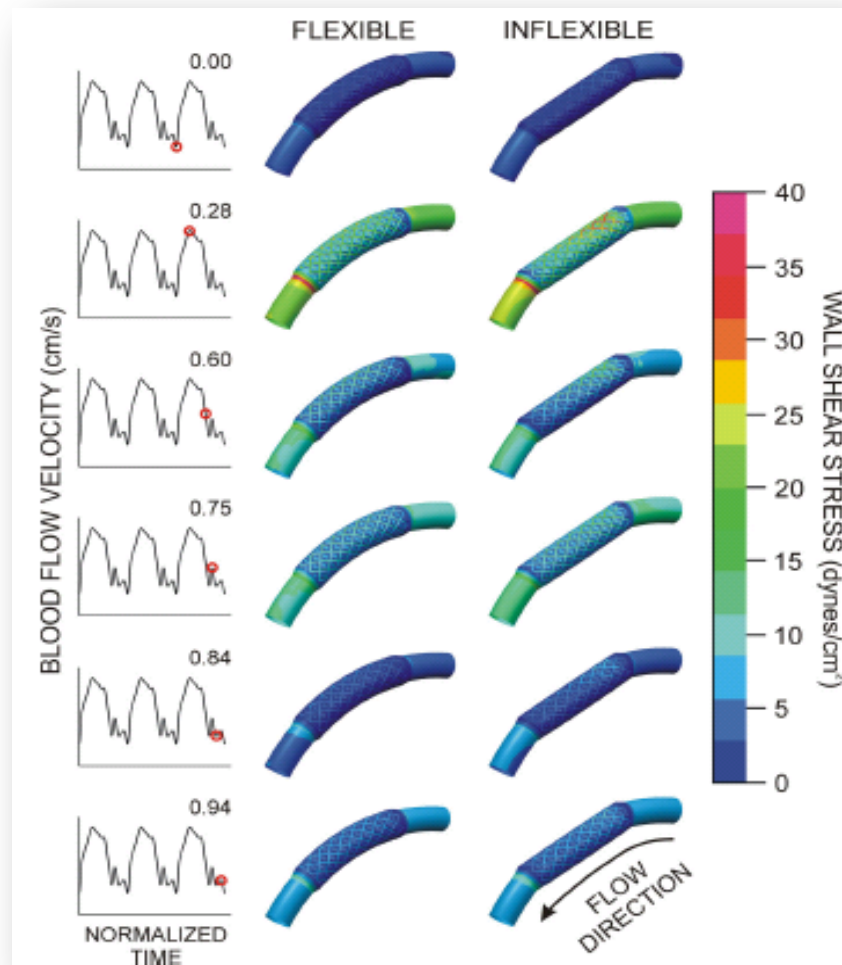
La conformabilité

Conformabilité



	Pre-scaffold	Balloon	Post-scaffold	P value Pre vs. Post
Angulation, °	28.7	10.4	26.9	<0.001

La rigidité créée par le stent modifie les forces de cisaillement et empêche le remodelage positif

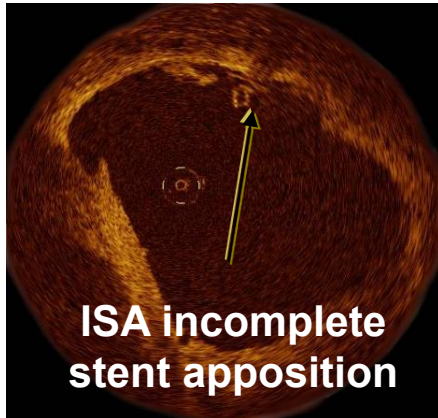


Top 2:

Le concept de restauration
Vasculaire est maintenant
une réalité

Biorésorption

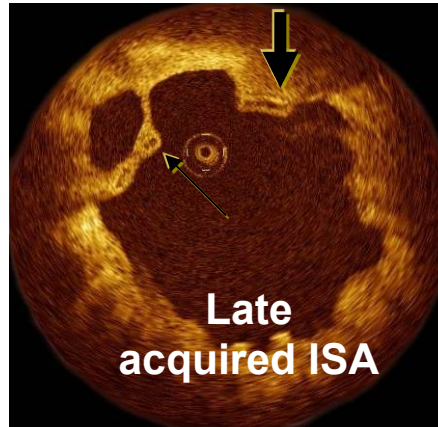
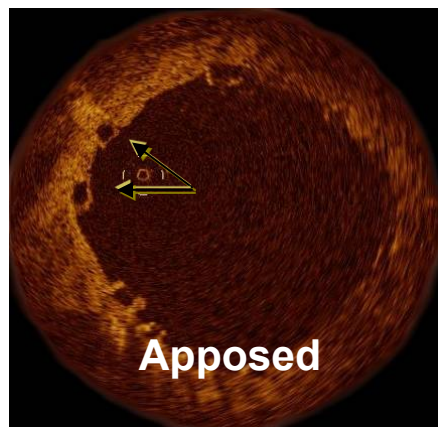
BL



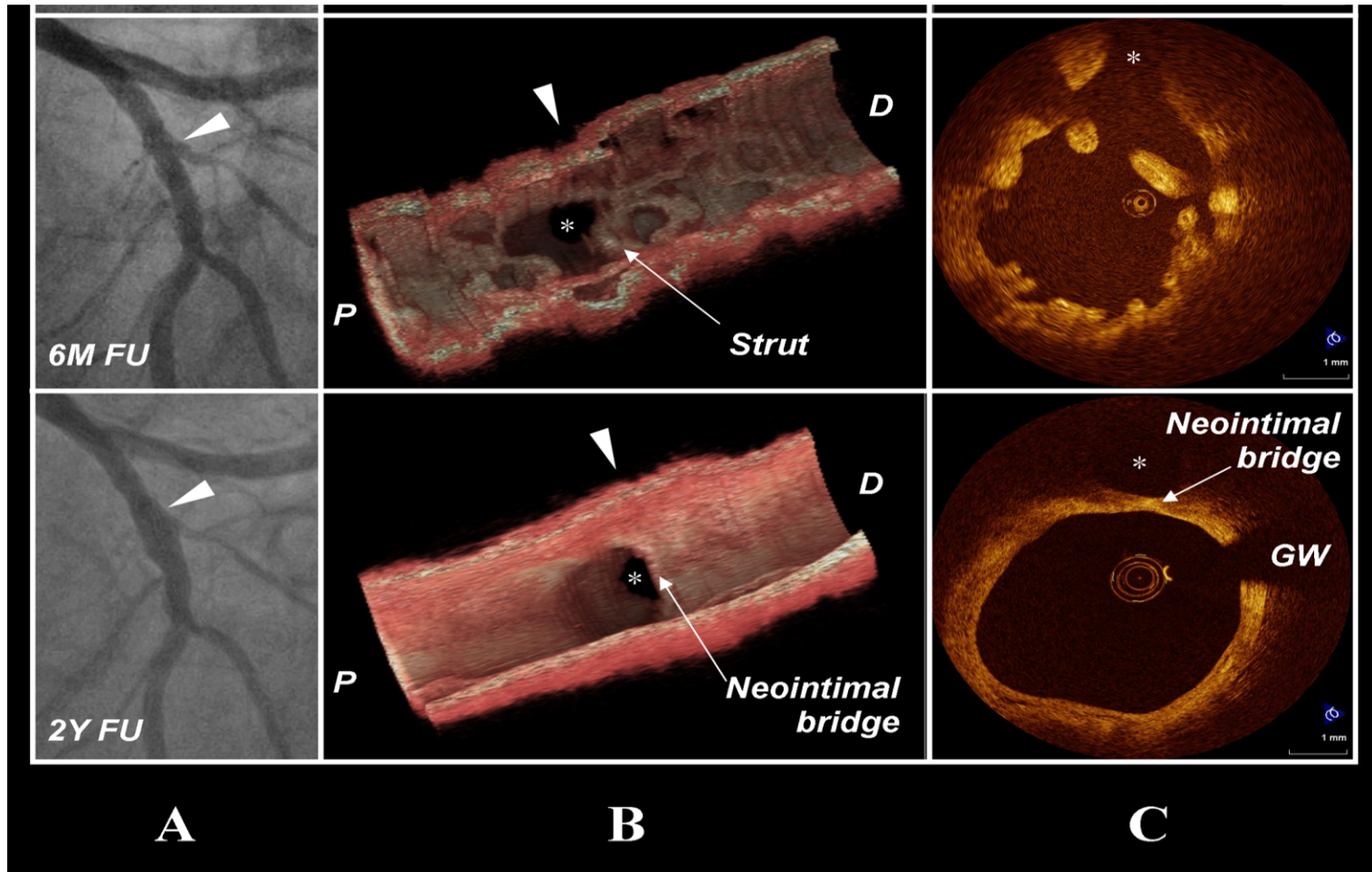
6M



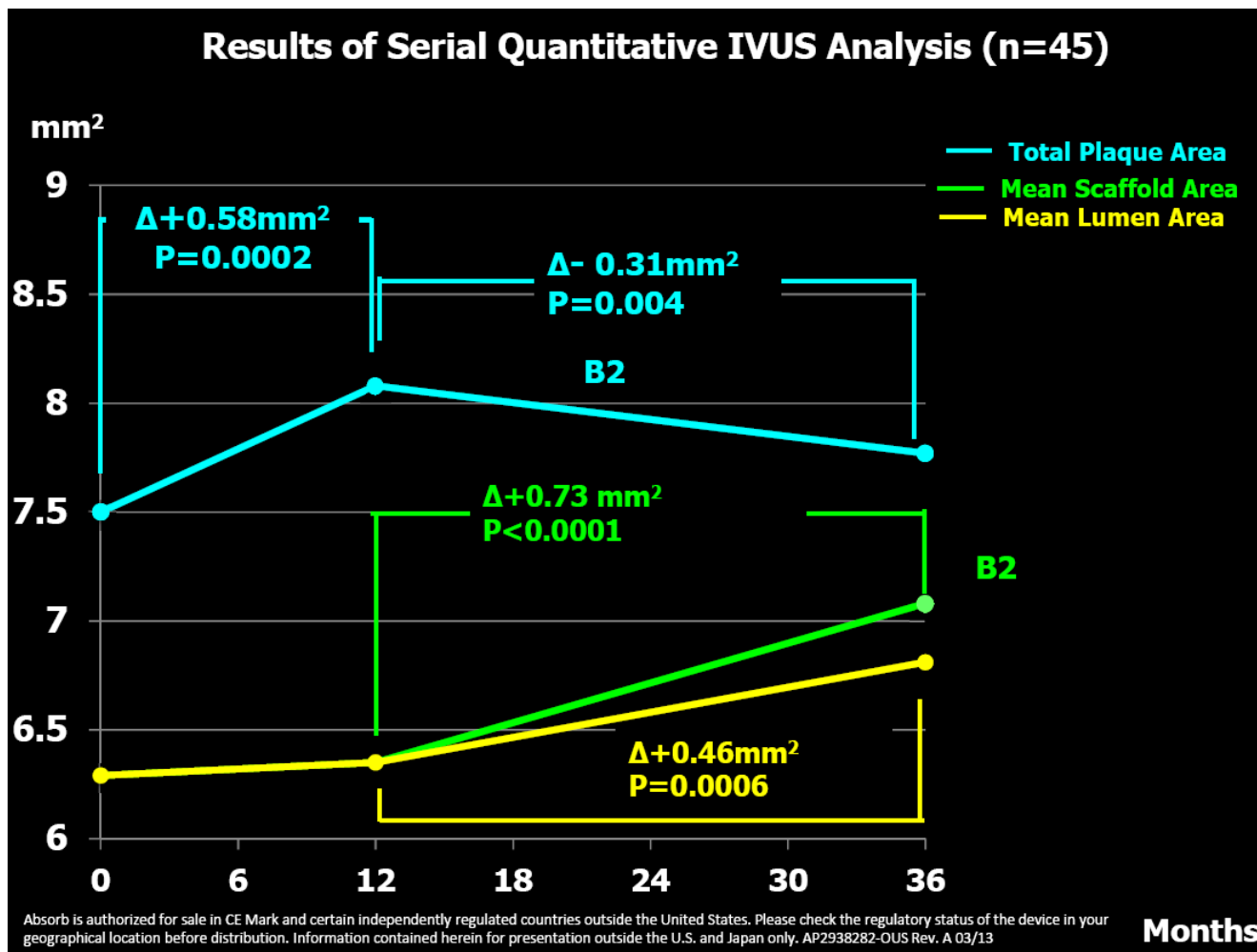
2Y



Biorésorption



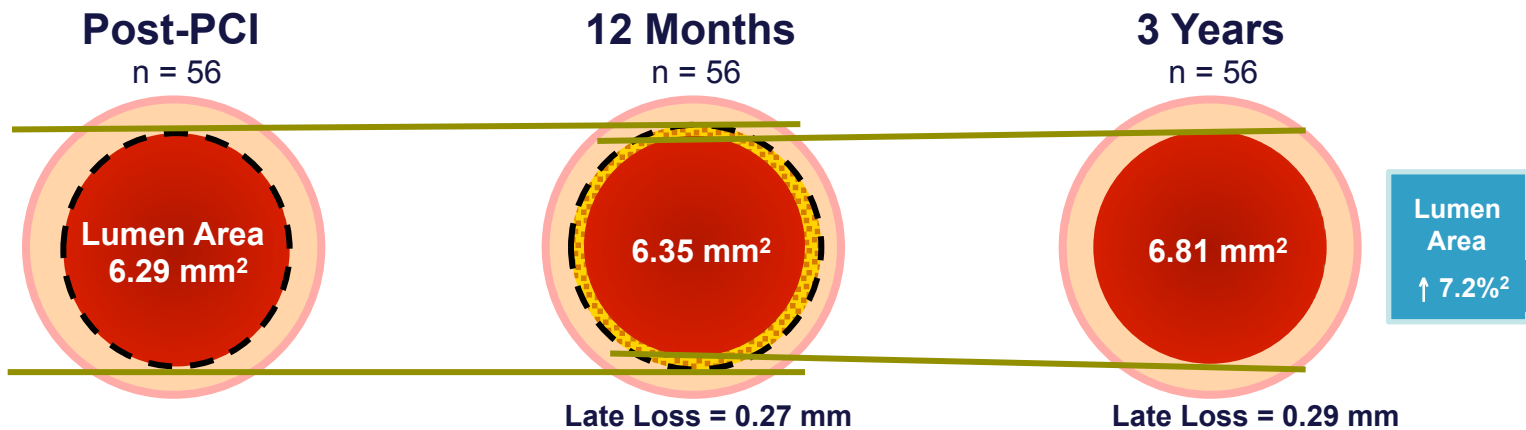
Régression de la plaque dans Absorb Cohort B



Régression de la Plaque à 3 ans: -0.31mm^2

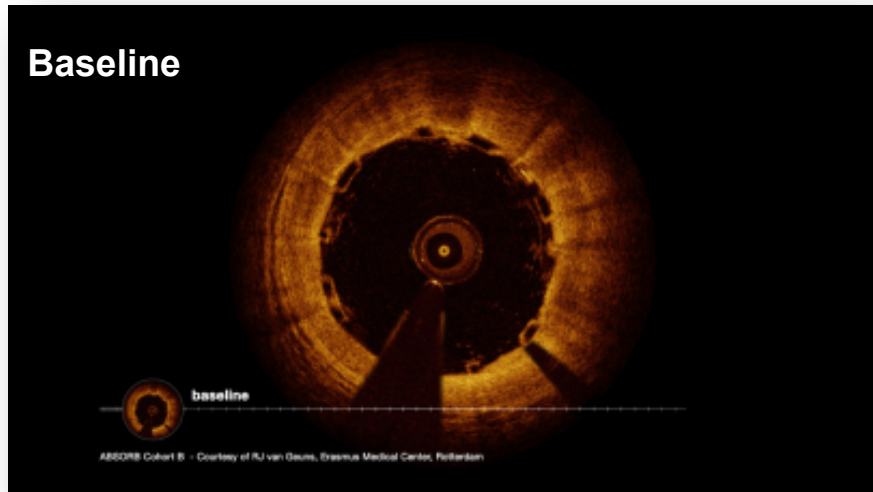
ABSORB Cohort B

**ABSORB
Cohort B2**
Paired Analysis**

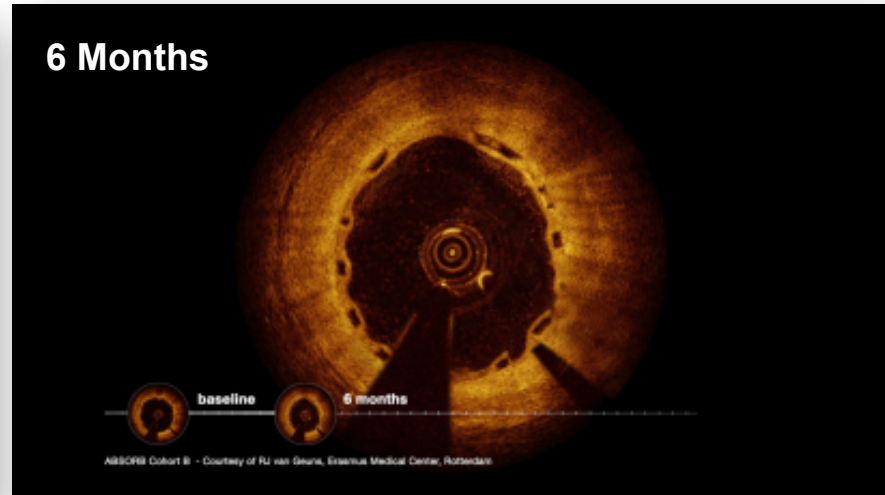


ABSORB Cohort B

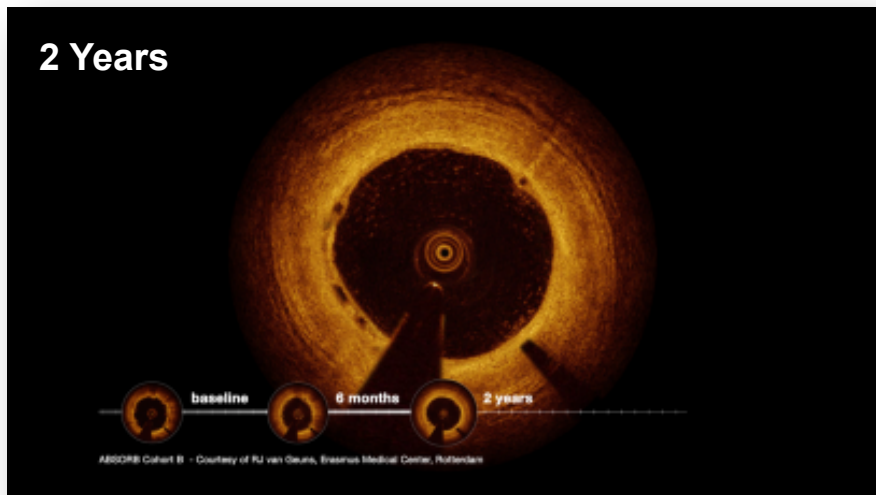
Baseline



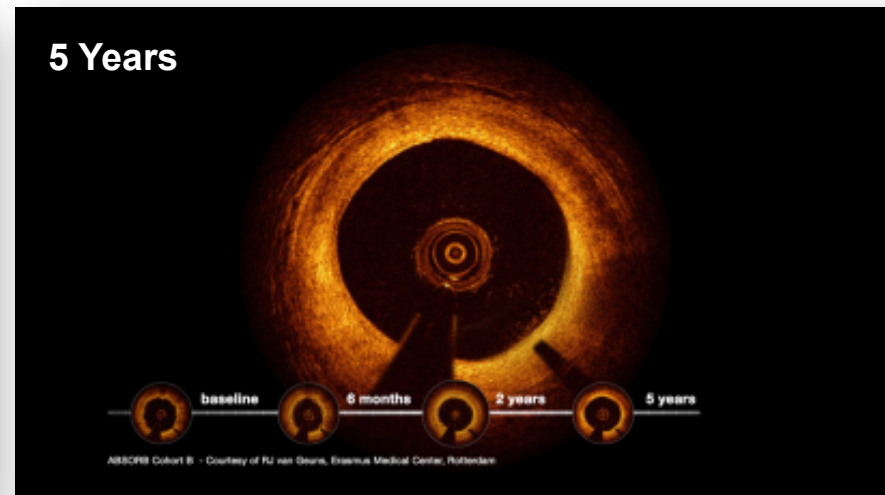
6 Months



2 Years

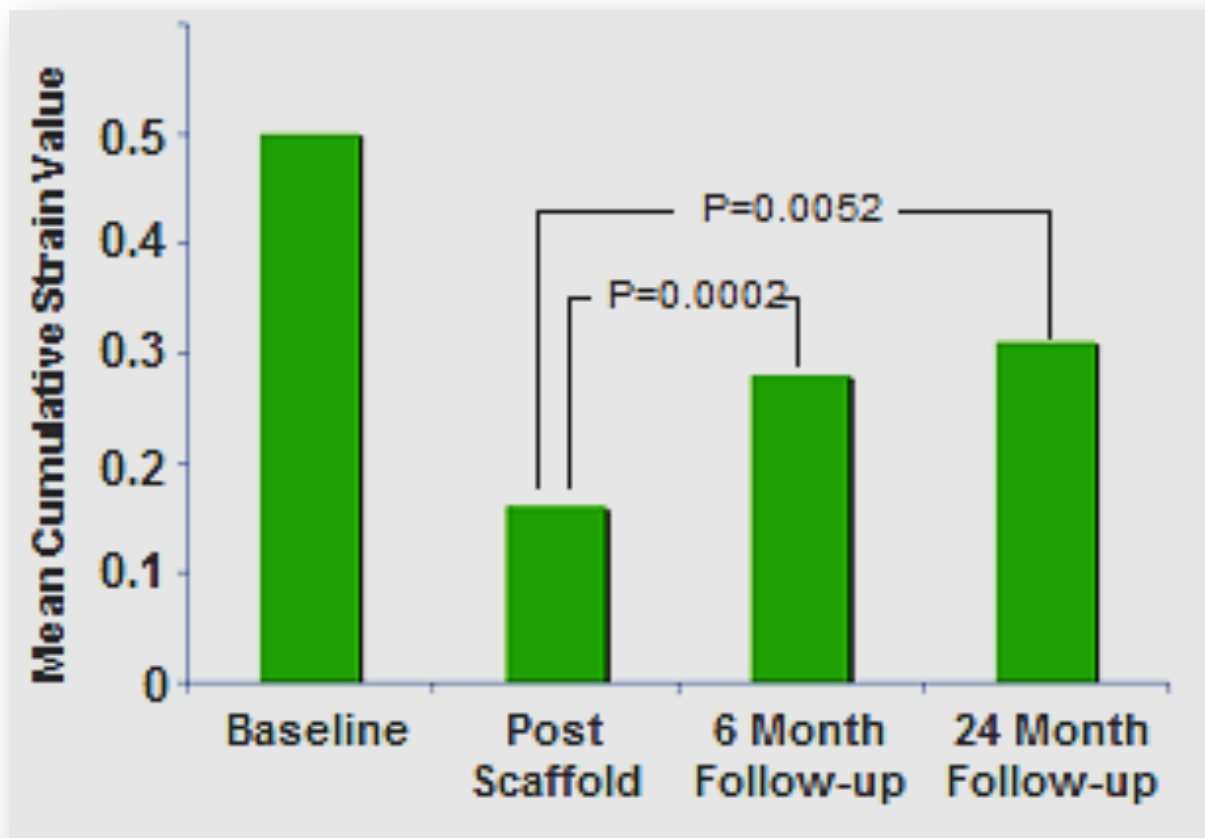


5 Years

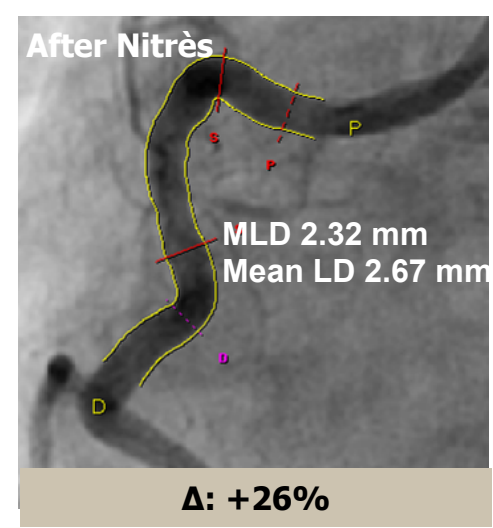
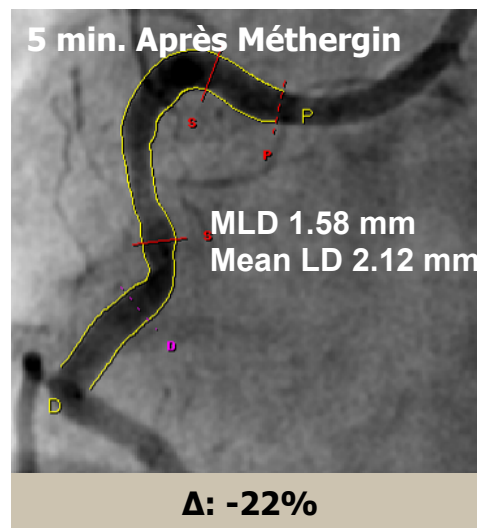
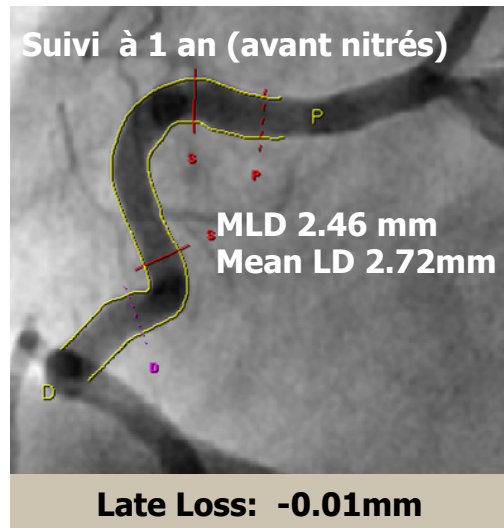
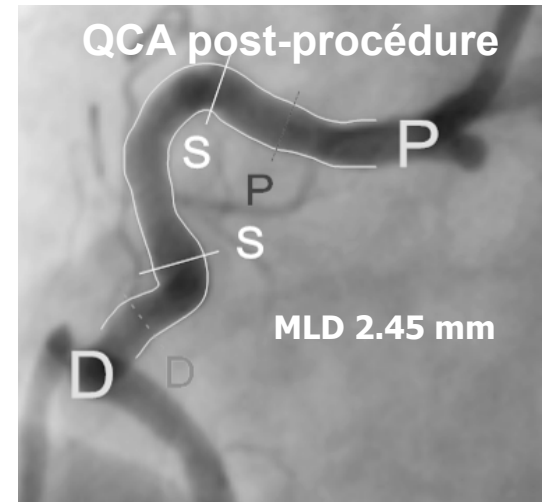
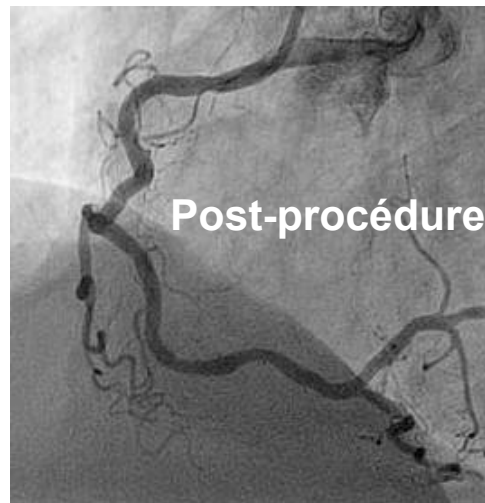
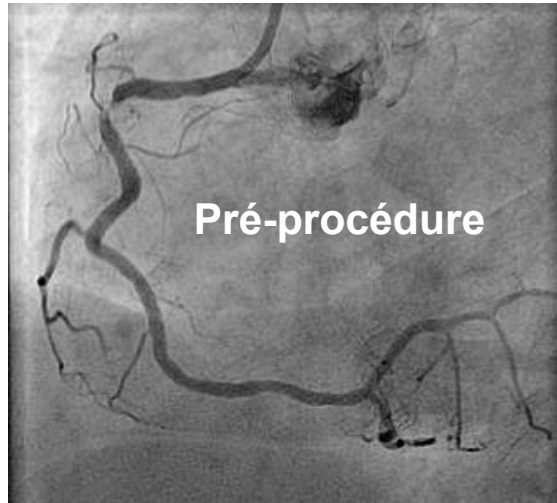


Récupération de la pulsatilité

Palpographie (Absorb Cohort)



Récupération de la pulsatilité



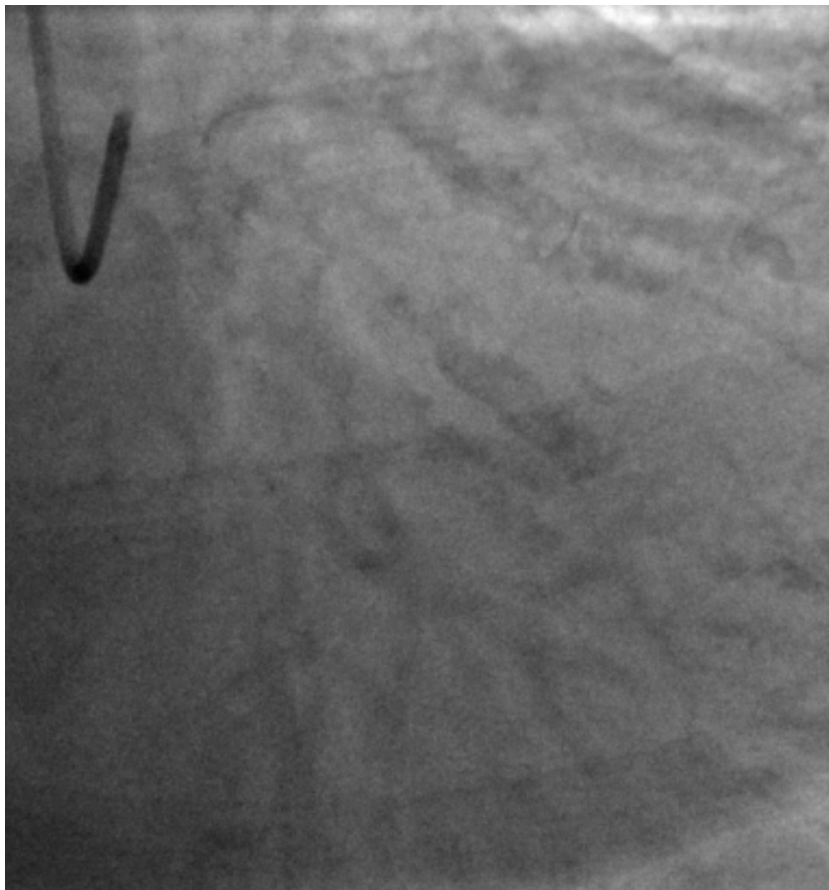
Top 1:

Le Vécu

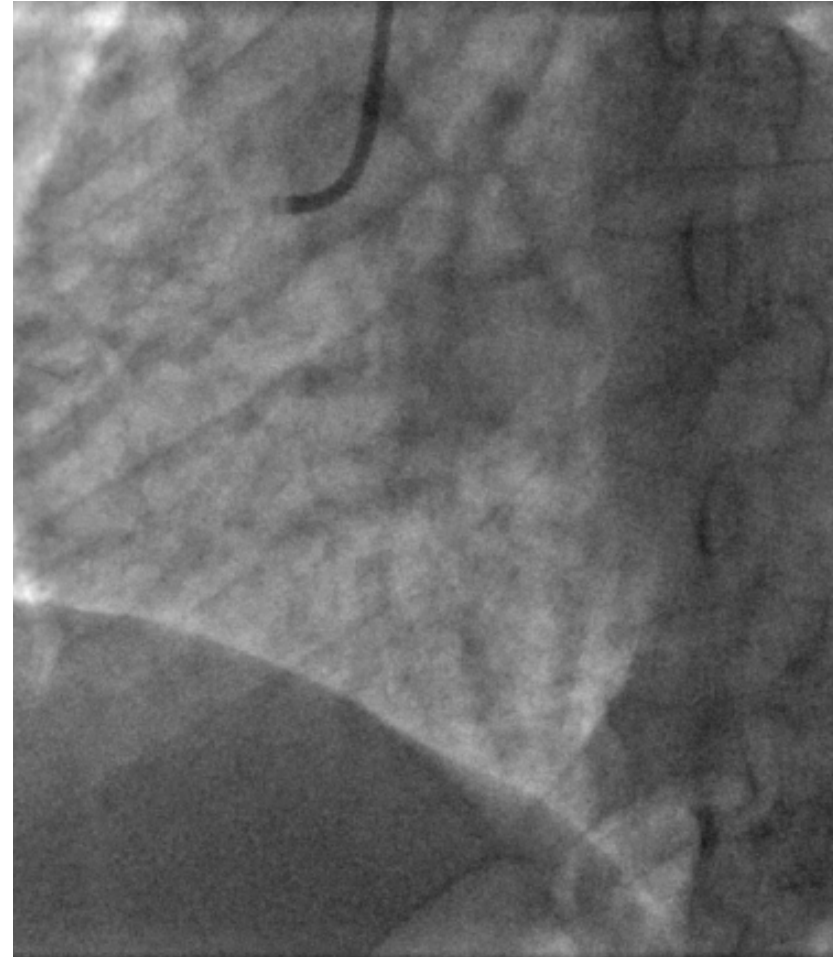
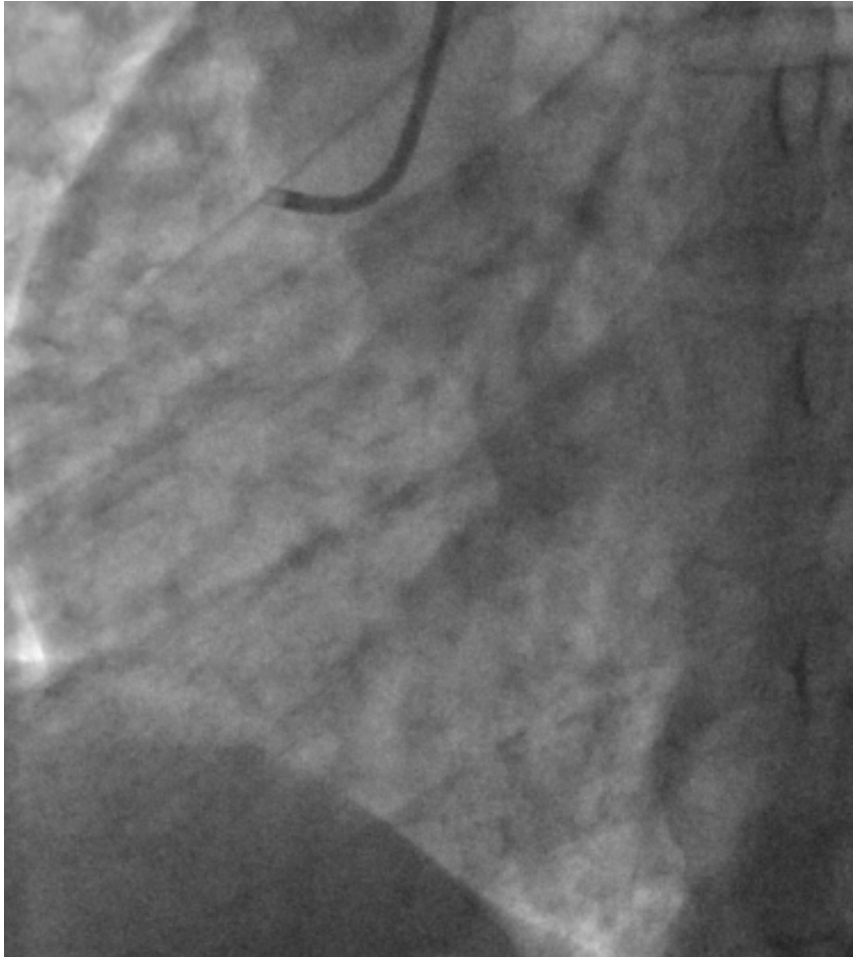
Expérience Absorb à Massy depuis 2009

Absorb cohort B	(n=8)		
Absorb Extend	(n=31)	Thrombose	0
Absorb 2	(n=16)	TVR (n)	2
France Absorb	(n=32)		

Expérience Absorb à Massy depuis 2009



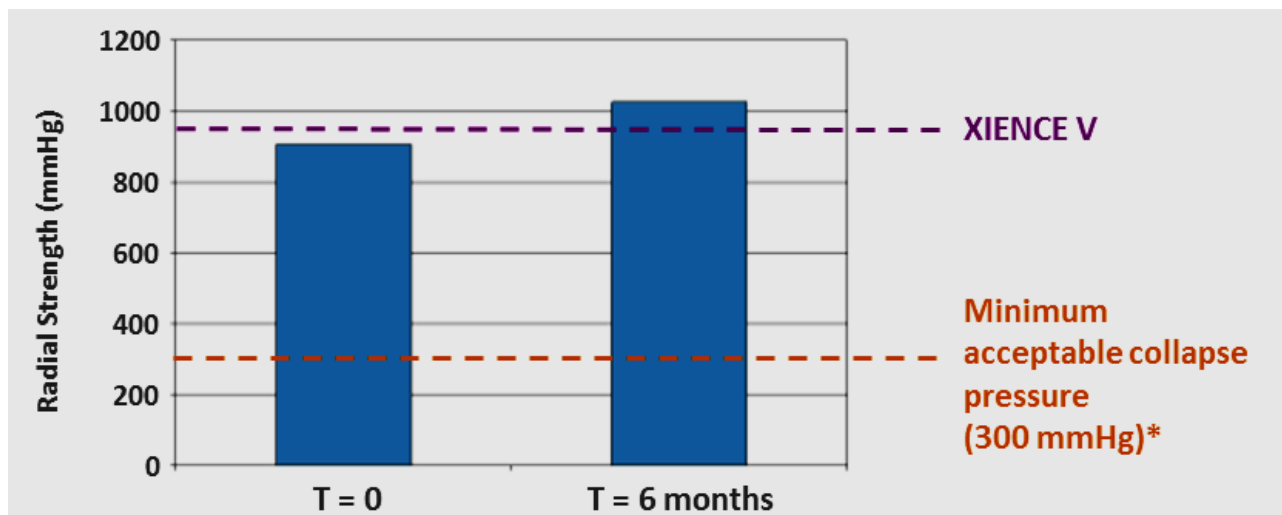
Expérience Absorb à Massy depuis 2009



Conclusion

- ✓ Aussi bien qu'un bon DES sur des lésions relativement simple a condition de suivre les règles d'utilisation.
- ✓ Reset de la lésion, conformabilité, pulsatilité, pas de néoathérosclérose, pas de thrombose tardive.
- ✓ Les limitations actuelles devraient être résolues par les nouvelles générations qui ouvriront la voie vers une utilisation plus large sur des lésions plus complexes.

Back up Slide



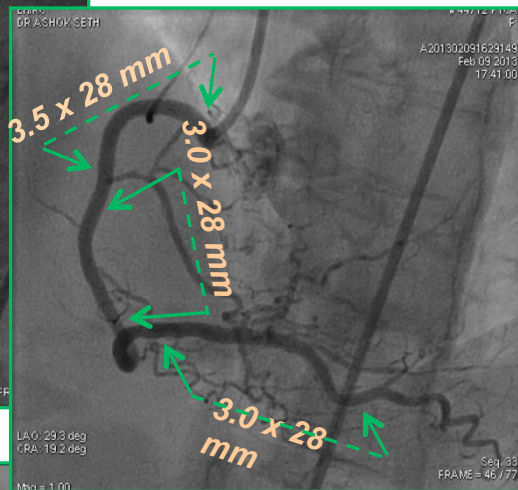
ABSORB Cohort A

Hierarchical	RESTORATION		RESORPTION	
	6 Months 30 Patients	1 Year 29 Patients**	2 Year 29 Patients**	5 Year 29 Patients**
MACE	3.3% (1)*	3.4% (1)*	3.4% (1)*	3.4% (1)*
Cardiac Death	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
MI	3.3% (1)*	3.4% (1)*	3.4% (1)*	3.4% (1)*
Q-Wave MI	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
Non Q-Wave MI	3.3% (1)*	3.4% (1)*	3.4% (1)*	3.4% (1)*
Ischemia Driven TLR	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
by PCI	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
by CABG	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)

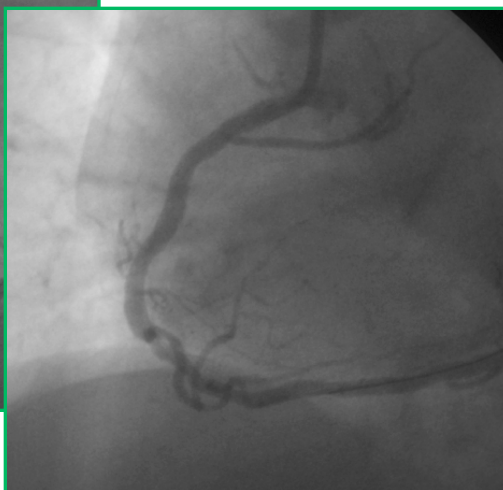
No scaffold thrombosis by ARC or Protocol



Tortuous Lesions¹



Diabetic Patients³

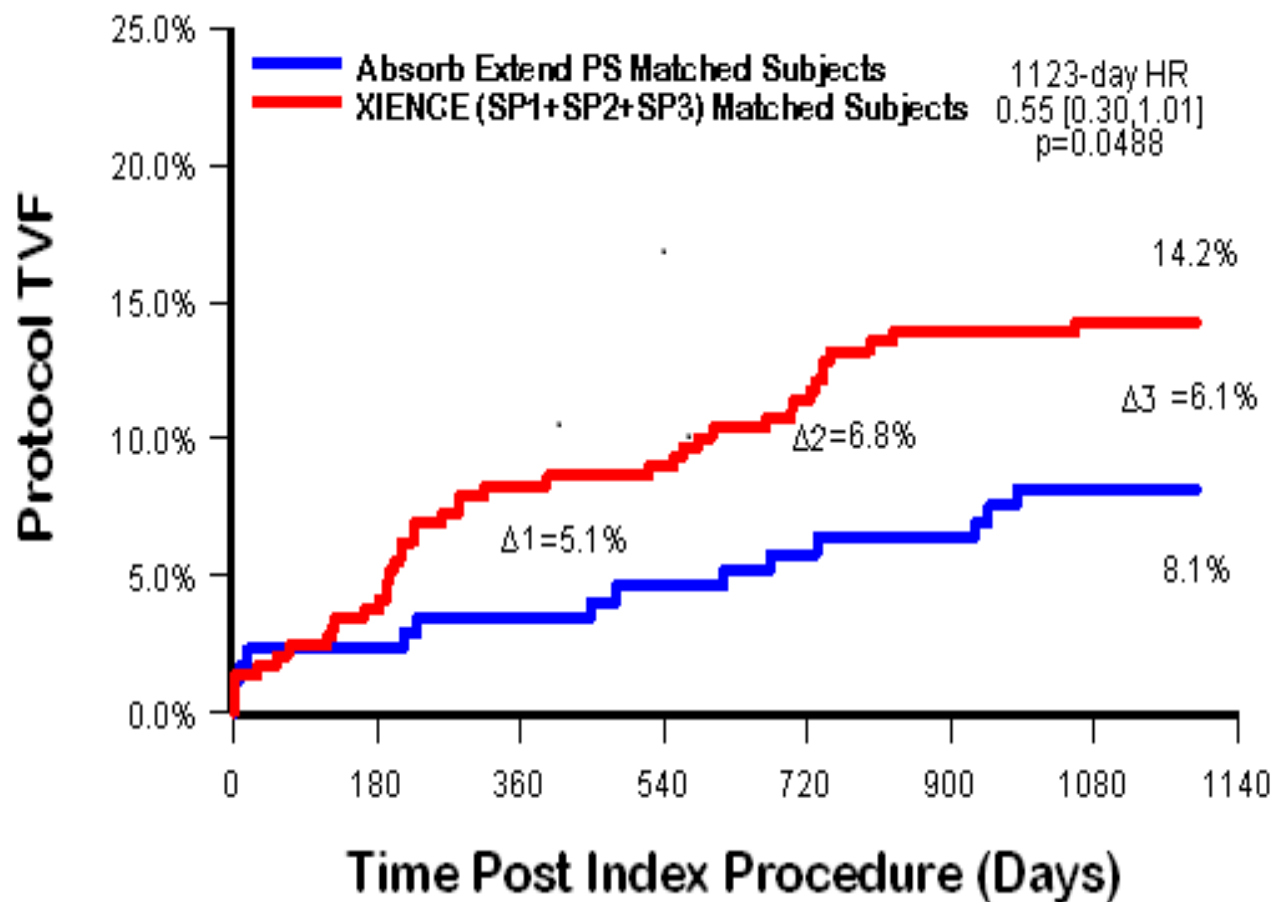


STEMI Patients²



Images courtesy of 1. Dr. Ashok Seth (India), 2. Prof. Teguh Santoso (Indonesia), 3. Dr. Attilio Varricchio (Italy)

ABSORB EXTEND vs XIENCE- Propensity score adjusted

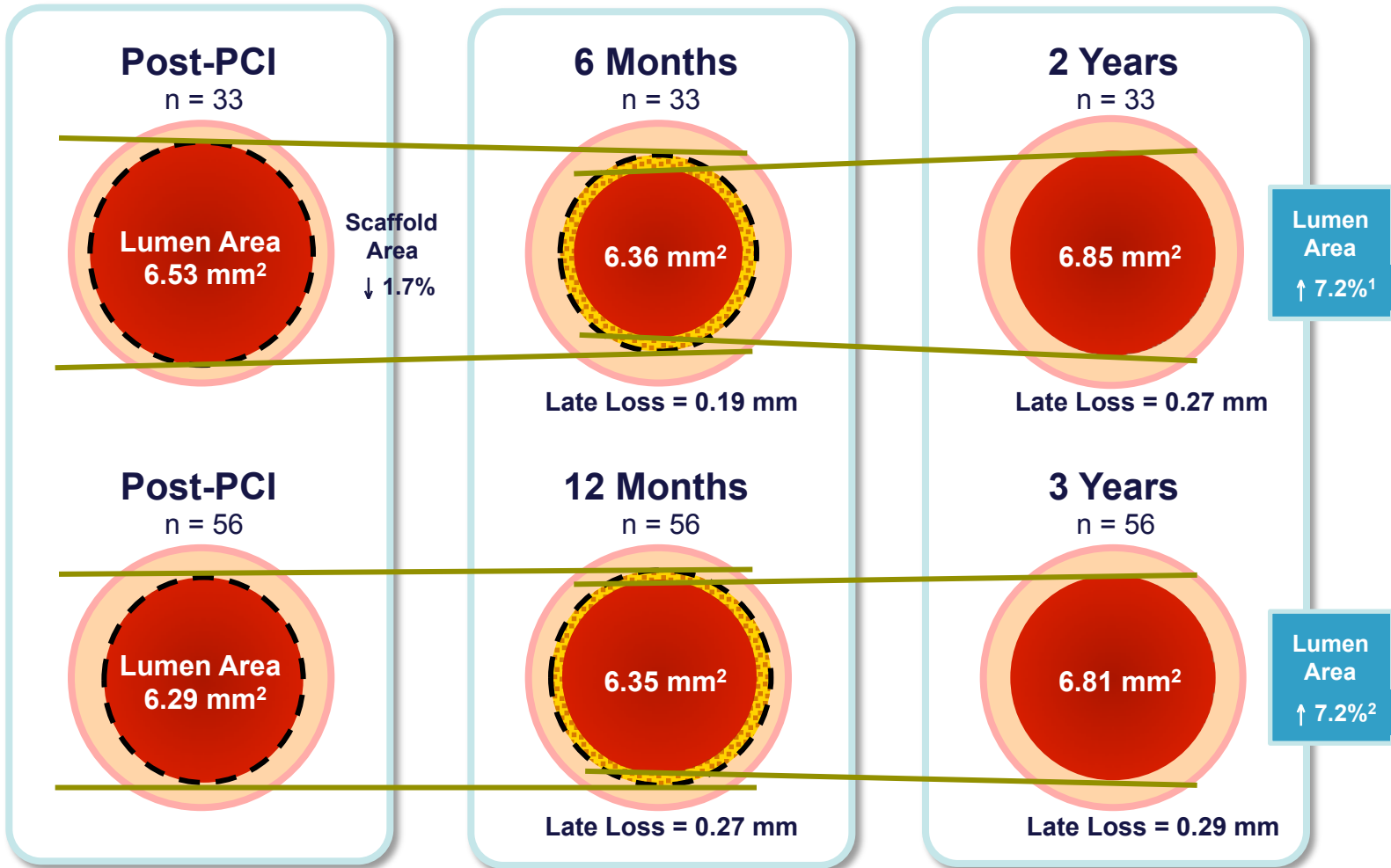


ABSORB EXTEND – Diabetic Subgroup

	Diabetic (N=119)	Non Diabetic (N=331)	P-value
Non-Hierarchical			
Cardiac Death %	0.0	0.3*	1.00
Myocardial Infarction %	3.4	2.7	0.75
Q-wave MI	0.0	1.2	0.58
Non Q-wave MI	3.4	1.5	0.25
Ischemia driven TLR %	1.7	1.8	1.00
CABG	0.0	0.6	1.00
PCI	1.7	1.8	1.00
Hierarchical MACE %	4.2	4.2	0.63
Hierarchical TLF %	4.2	4.2	1.00

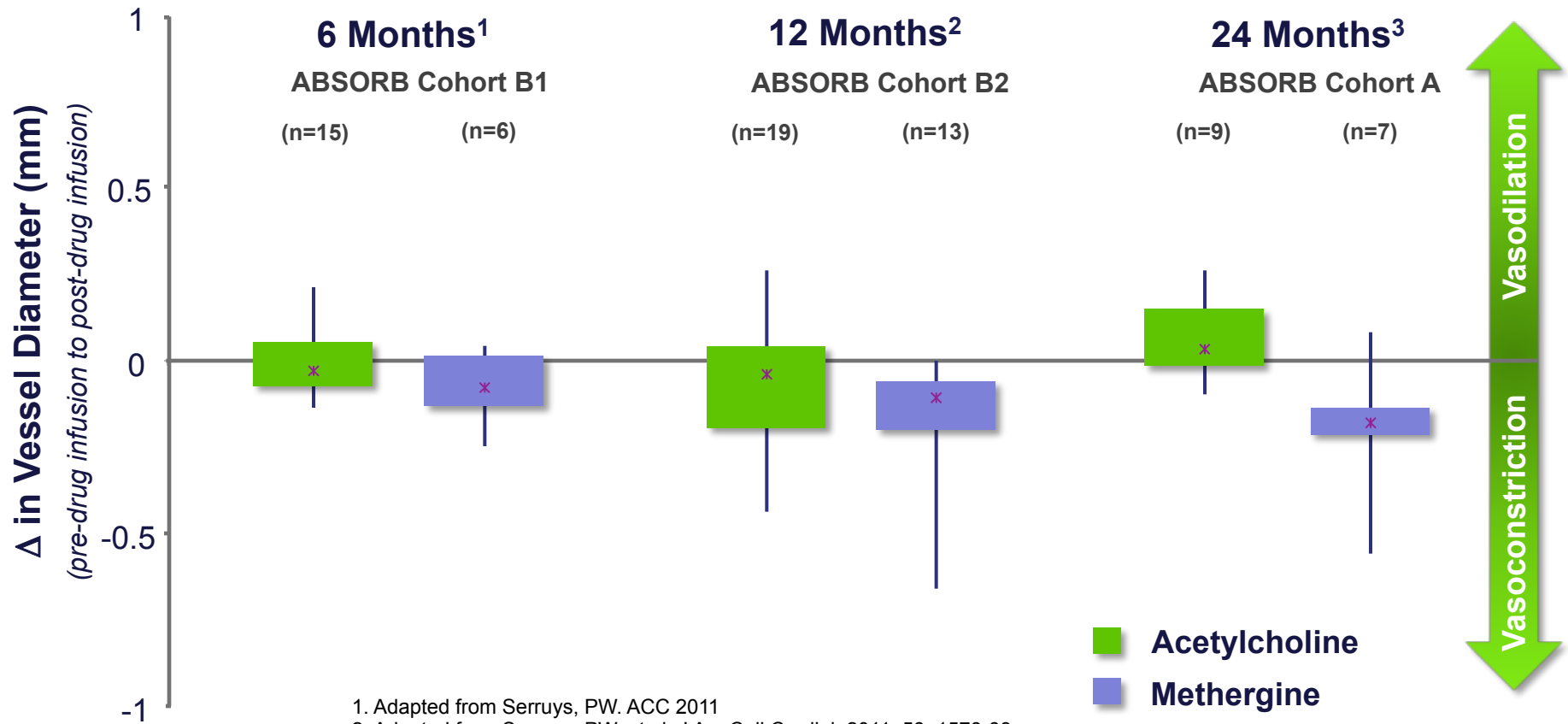
Late Lumen Gain

ABSORB Cohort B1 Serial Analysis*



1. Patient-level serial analysis
2. Calculated from overall mean values

Restored Vasomotion



1. Adapted from Serruys, PW. ACC 2011
 2. Adapted from Serruys, PW. et al. J Am Coll Cardiol. 2011; 58: 1578-88
 3. Adapted from Serruys, PW, et al. Lancet 2009; 373: 897-910.

ABSORB BVS vs XIENCE – 12-month

Non-Hierarchical %	EXTEND/CoB* (N=551)	SPIRIT Pooled* (N=879)	p value
Cardiac Death %	0.2	0.6	0.42
Myocardial Infarction %	2.9	2.3	0.49
Q-wave MI	0.7	0.2	0.21
Non Q-wave MI	2.2	2.0	0.85
Ischemia driven TLR %	2.2	3.2	0.32
CABG	0.2	0.2	1.00
PCI	2.0	3.0	0.31
Hierarchical MACE %	4.7	5.3	0.62
Definite or probable S Thrombosis %	0.7	0.7	1.00

ABSORB EXTEND

Non-Hierarchical % (n)	12 Months (N = 250)	24 Months* (N = 250)	36 Months (N=250)
Cardiac Death %	0.4	0.4	0.8
Myocardial Infarction % **	2.8	4.0	4.0
Q-wave MI	1.2	1.2	1.2
Non Q-wave MI	1.6	2.8	2.8
Ischemia driven TLR %	2.0	4.0	6.0
CABG	0.0	0.4	0.4
PCI	2.0	4.0	6.0
Hierarchical MACE %	4.4	7.3	9.3
Hierarchical TVF %	4.8	8.1	10.1
Hierarchical TLF %	4.4	6.9	8.9
Scaffold Thrombosis (ARC Def/Prob) %	0.8	0.8	1.2

Le stent est source d'évènements tardifs

Long-term BMS event rate¹



Long-term DES event rate²

