

6-7 et 8 juin 2012 / BIARRITZ

Palais des Congrès - 1, avenue Edouard VII



# ENTRETIENS PLURIDISCIPLINAIRES EN CARDIOLOGIE INTERVENTIONNELLE

14<sup>ème</sup>  
EDITION



# APPAC

ACTUALISATIONS ET PERSPECTIVES  
EN PATHOLOGIE CARDIOVASCULAIRE

[www.appac.fr](http://www.appac.fr)



**Docteur B. VALEIX**  
**Clinique Casamance**  
**Aubagne**

17H50-18H50

## ATELIERS



### COMMENT TRAITER AUJOURD'HUI LES LÉSIONS CORONAIRES DE BIFURCATION ?

*Modérateur : B. VALEIX (Marseille)*

- Le concept NILE, les enjeux et les réponses
- Une lésion de bifurcation 1.1.0.
- Une lésion de bifurcation 1.1.1.

**B. VALEIX** (Marseille)

**P. DUPOUY** (Paris)

**R. BOURKAÏB** (Plessis-Robinson)

- Une lésion de bifurcation 1.1.1.
- Une lésion de bifurcation 1.1.0.

**R. BOURKAÏB** (Plessis-Robinson)

**P. DUPOUY** (Paris)



# CONFLIT D'INTERÊTS

- ◆ **Absence de conflit d'intérêts**  
- avec le laboratoire MINVASYS.

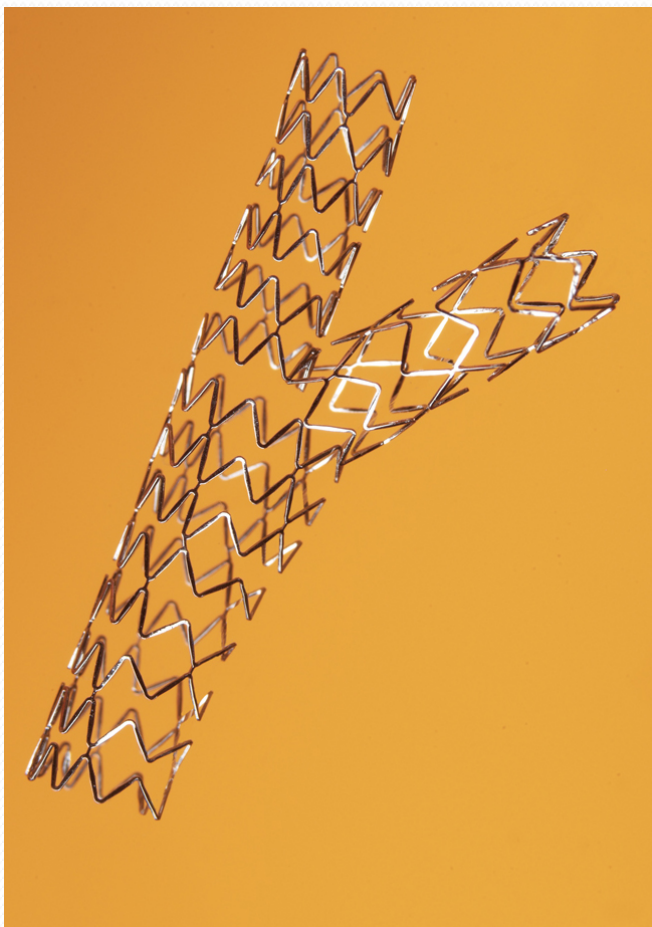


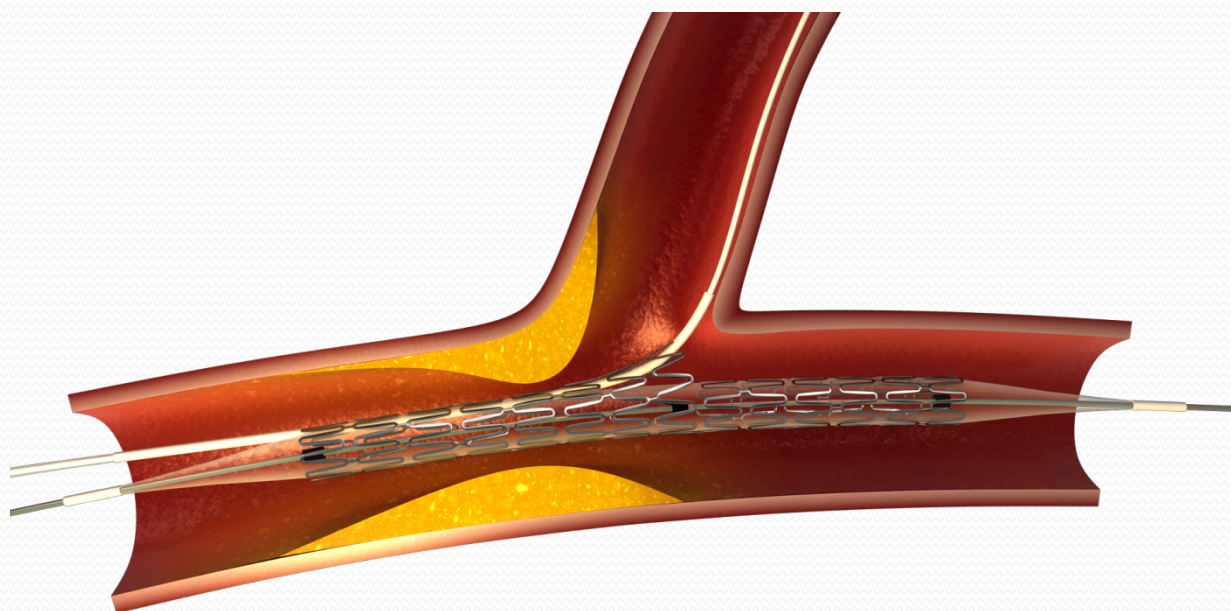
# LE CONCEPT NILE

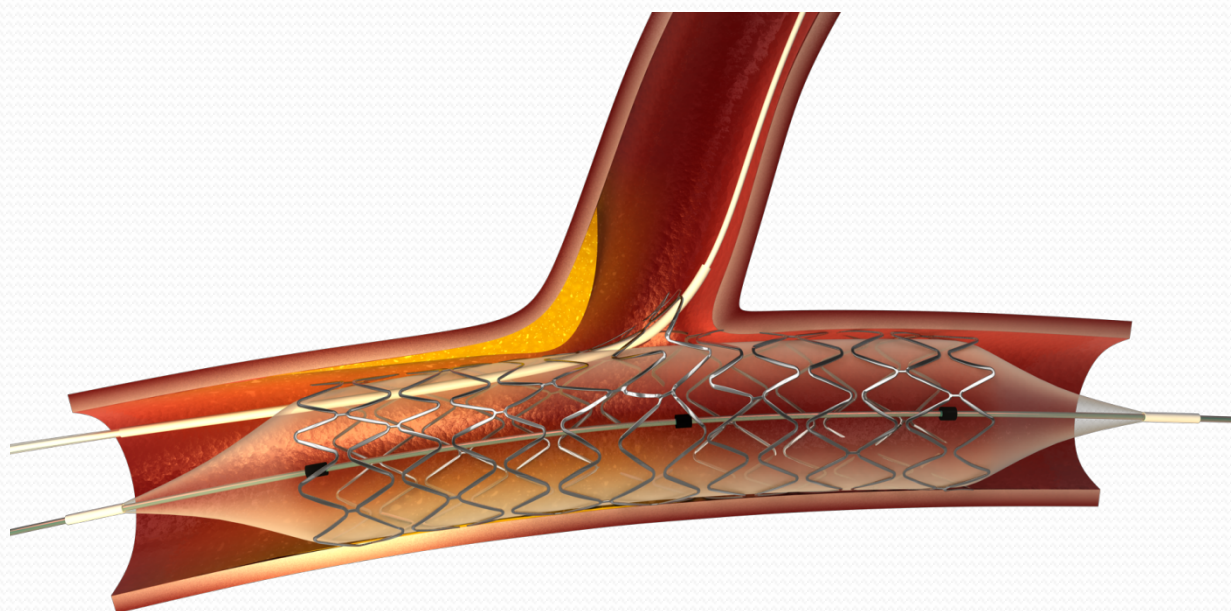
◆ Enjeux

◆ Réponses

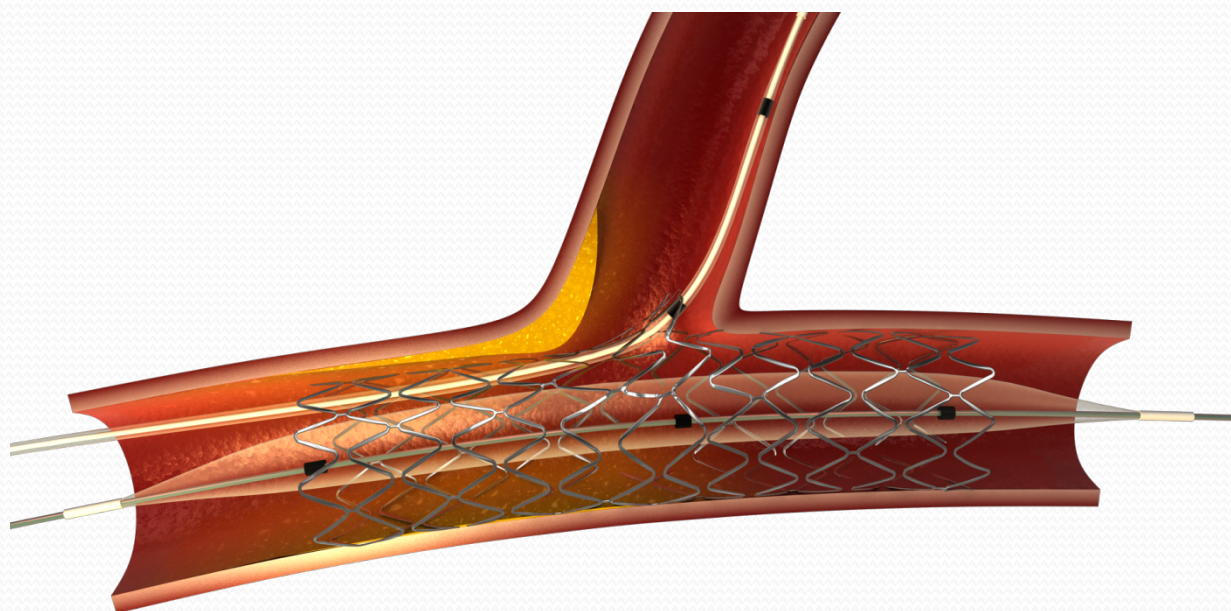


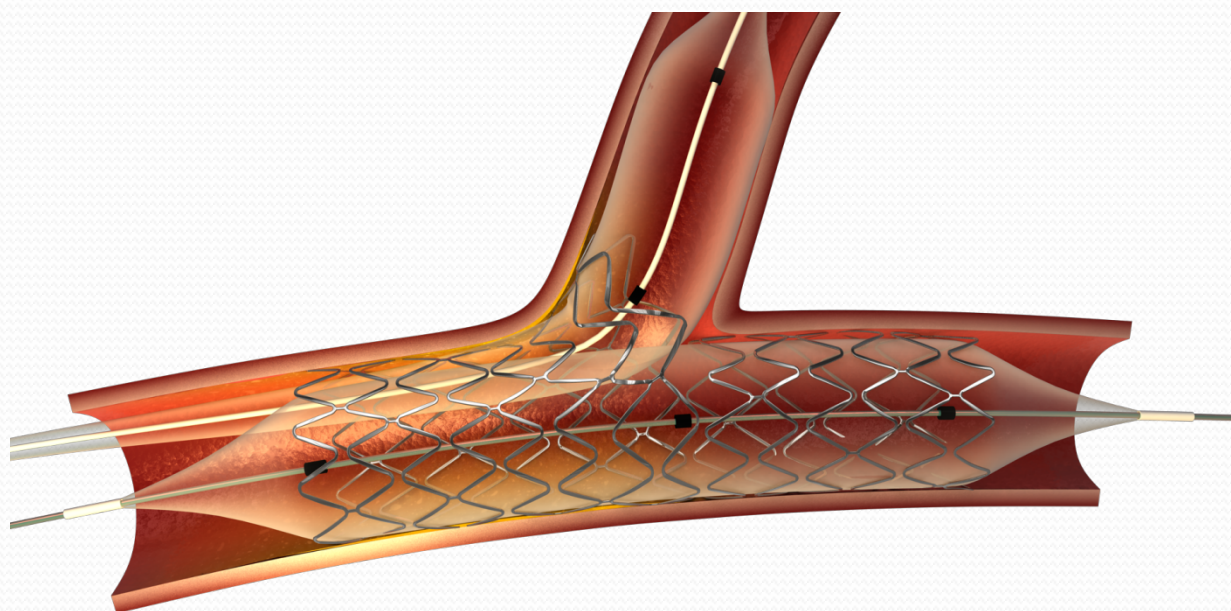


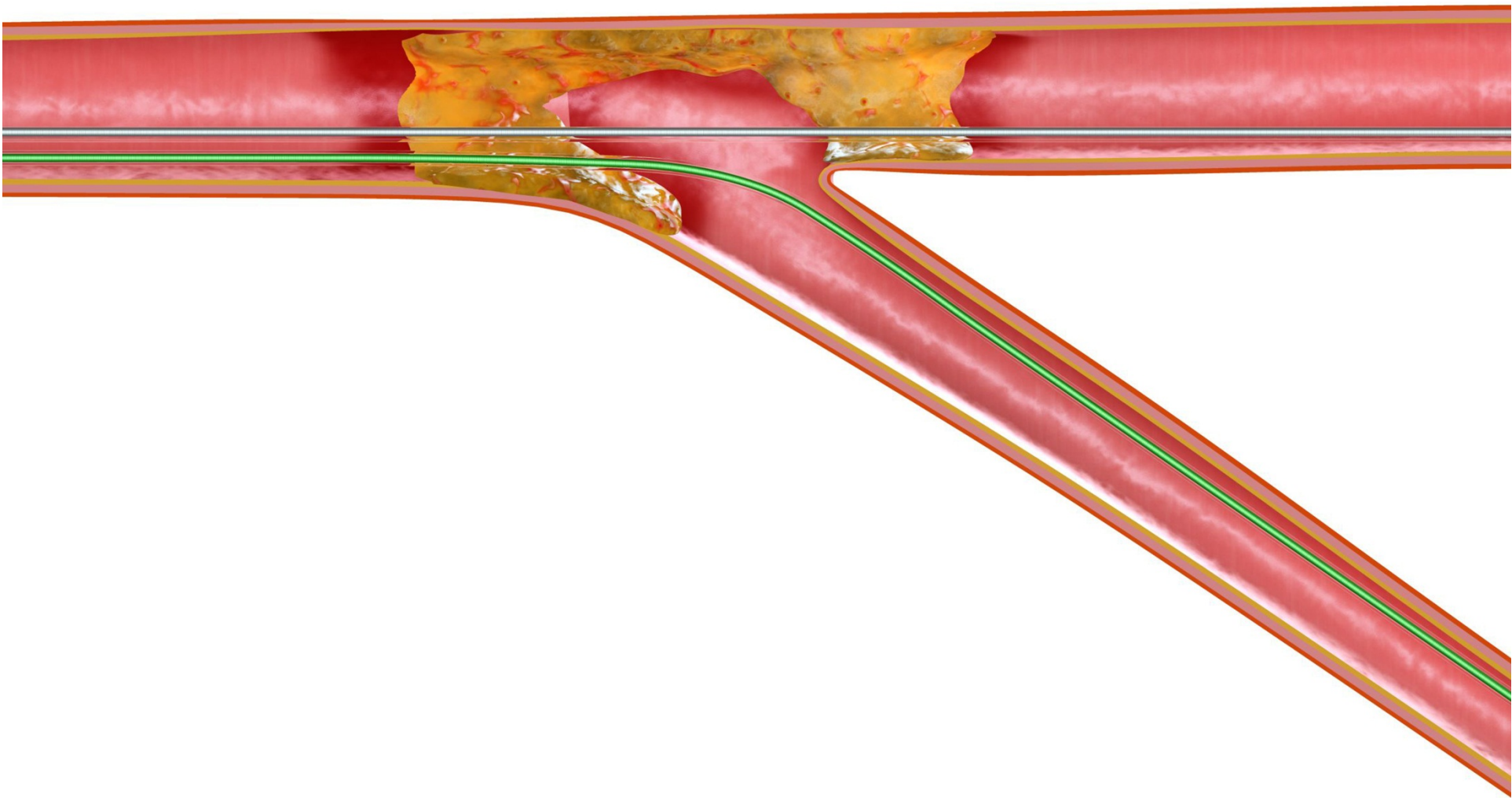




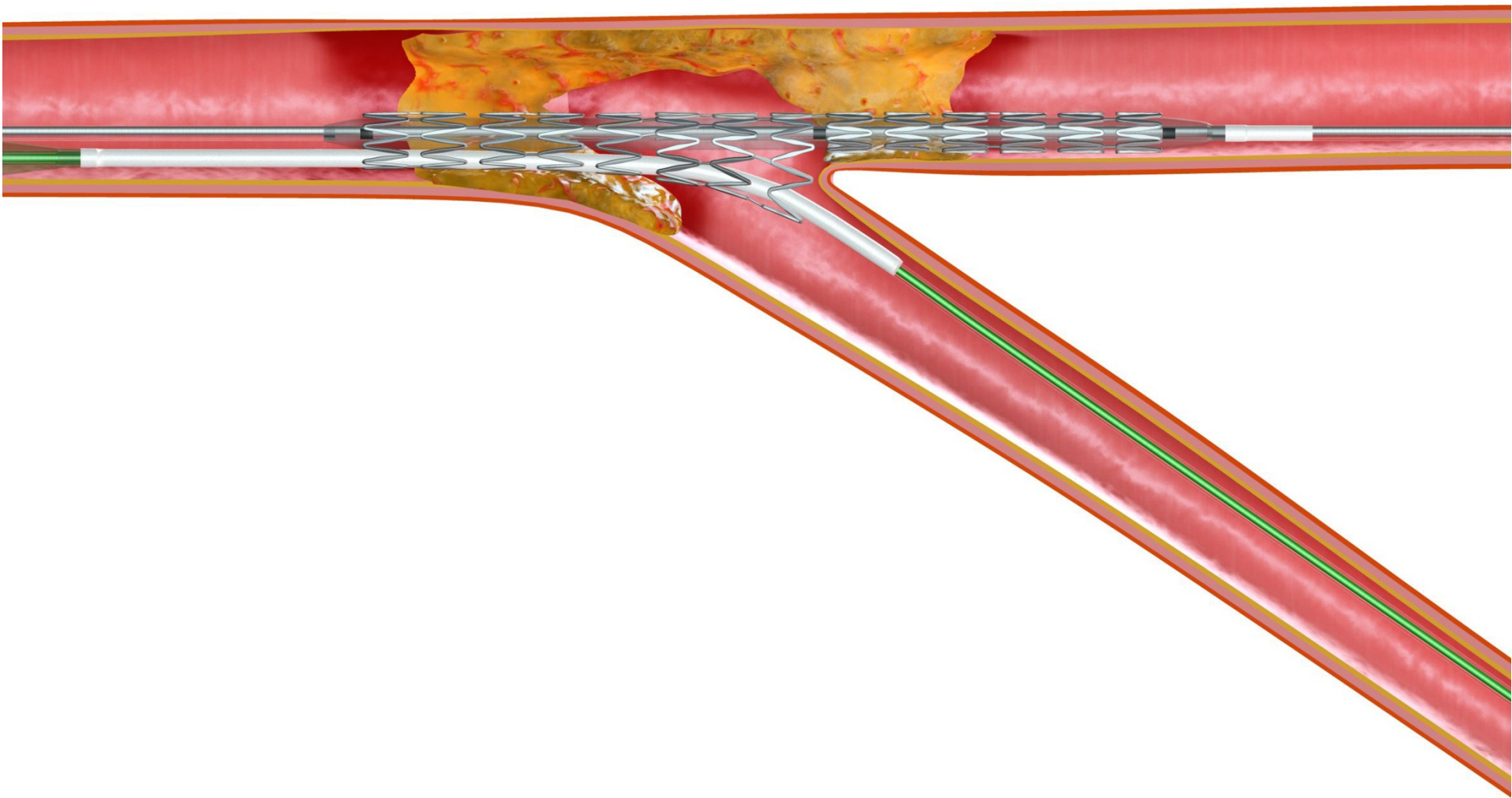


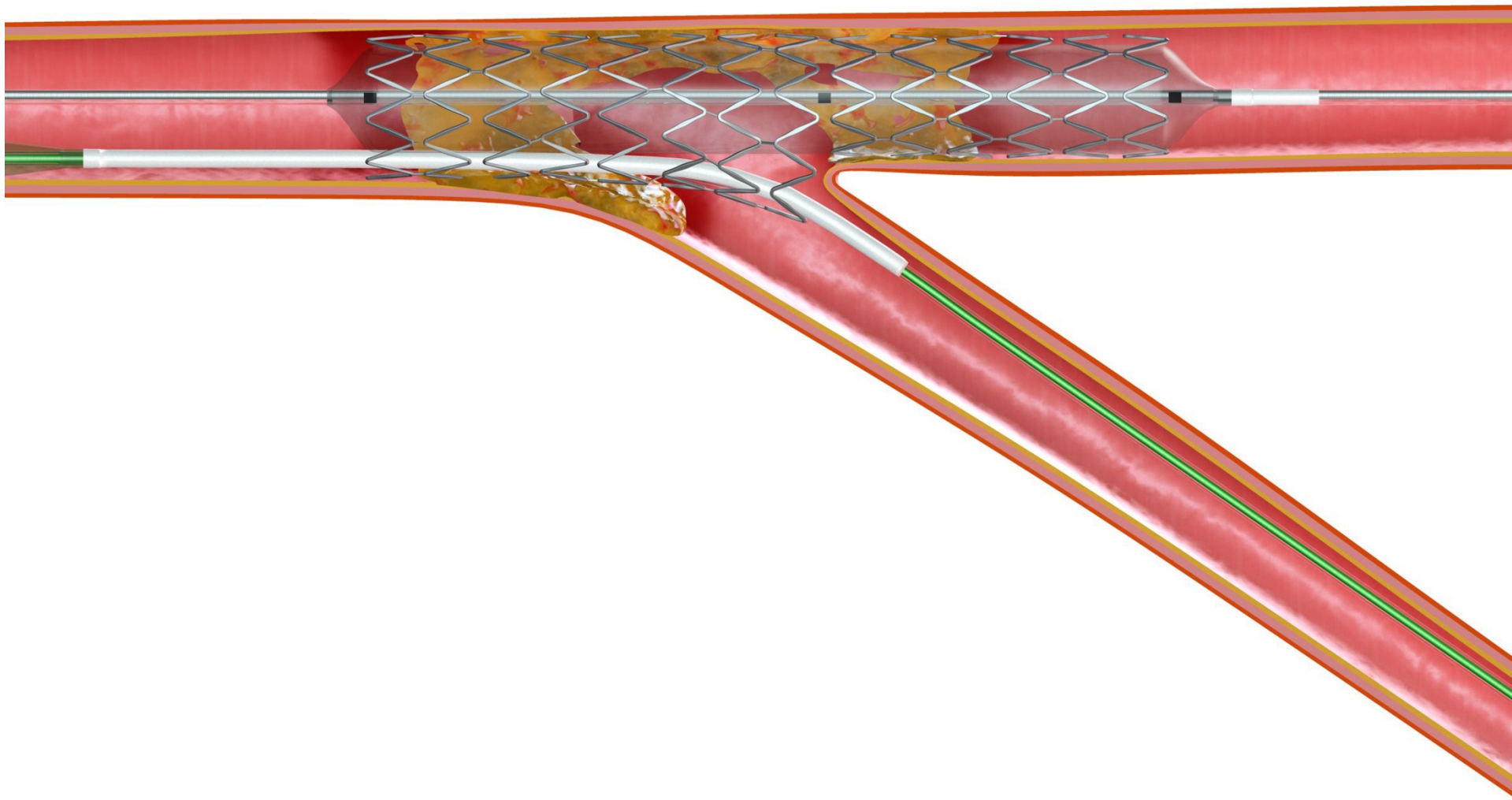


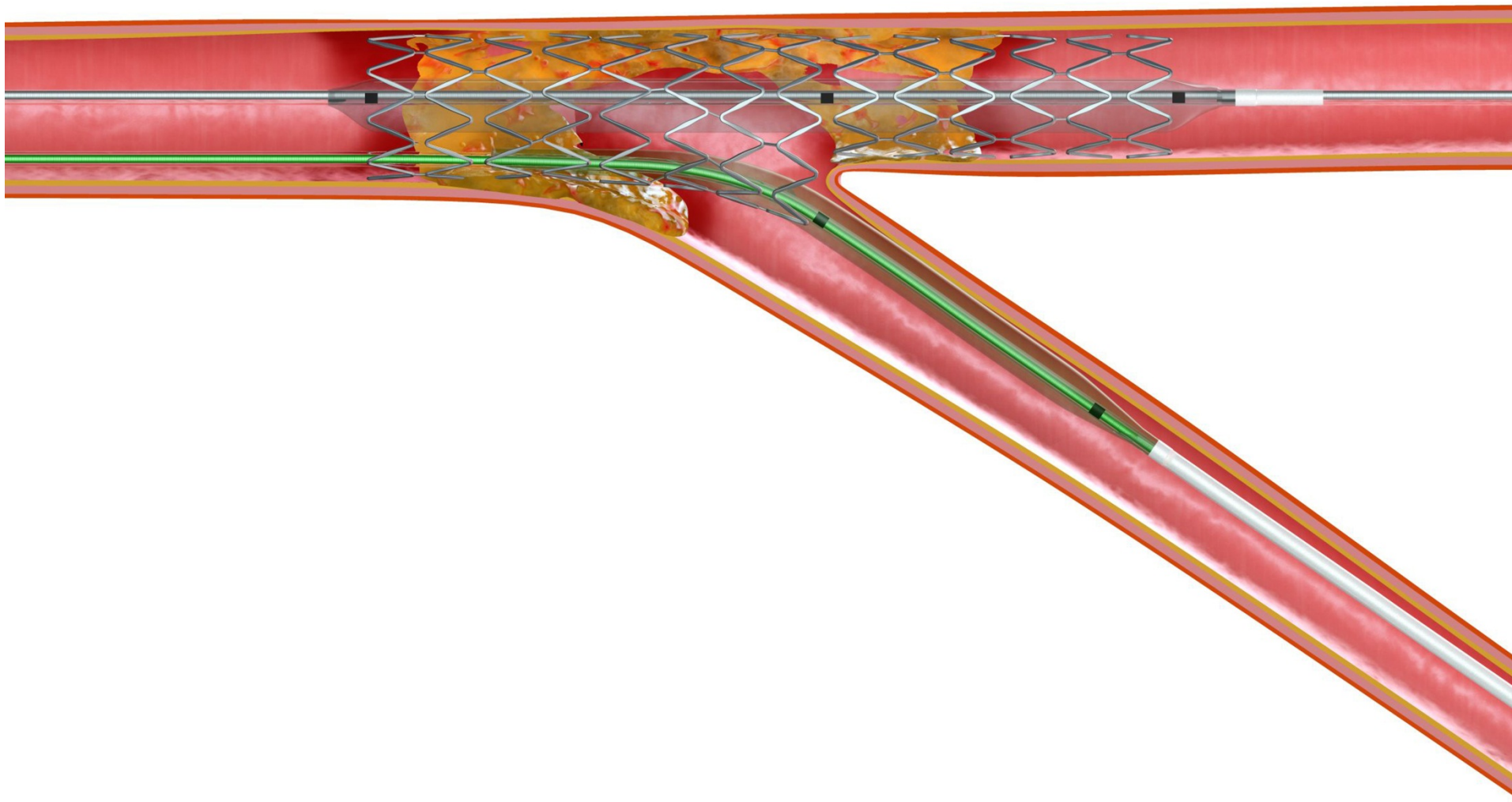




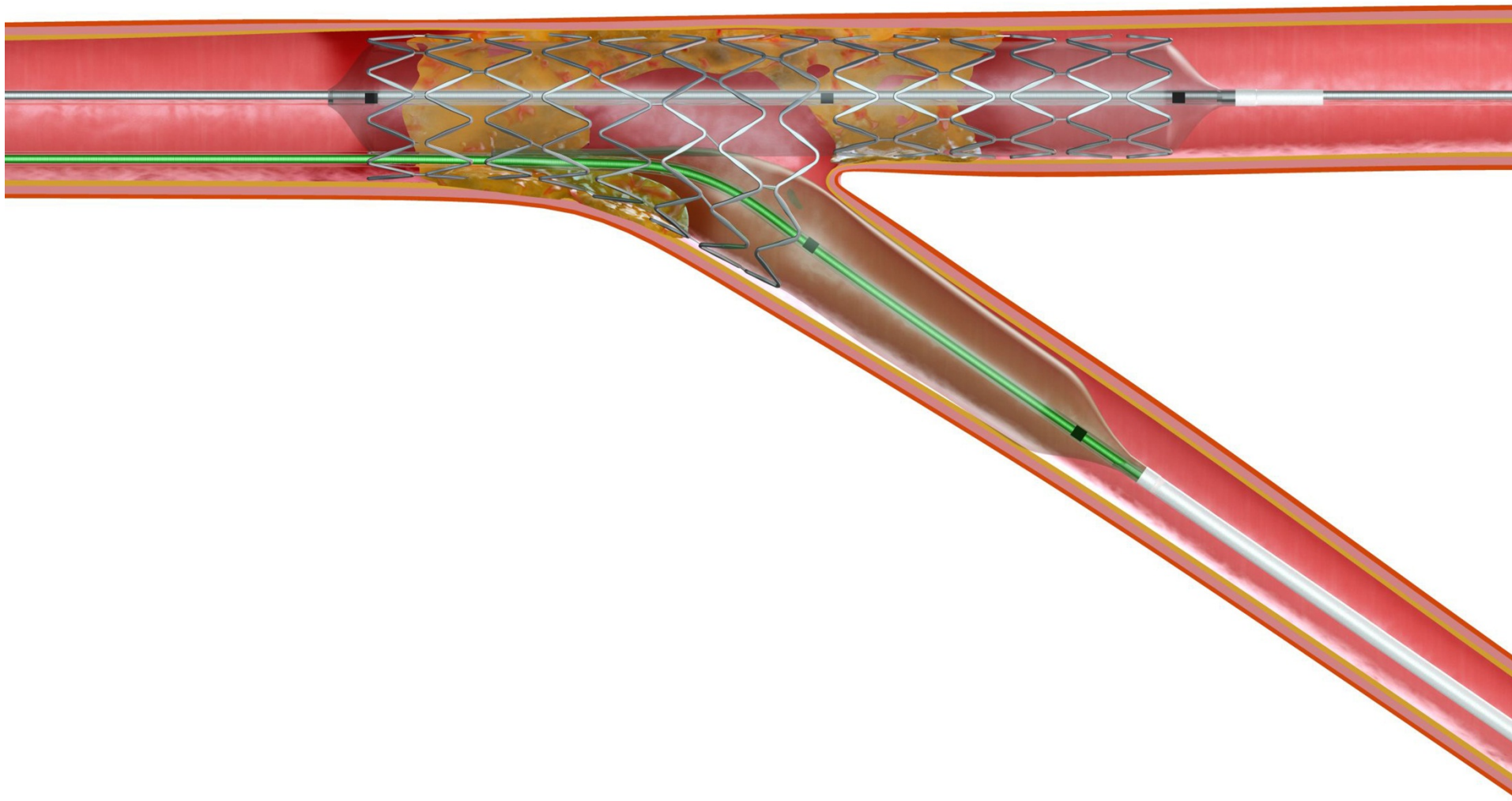


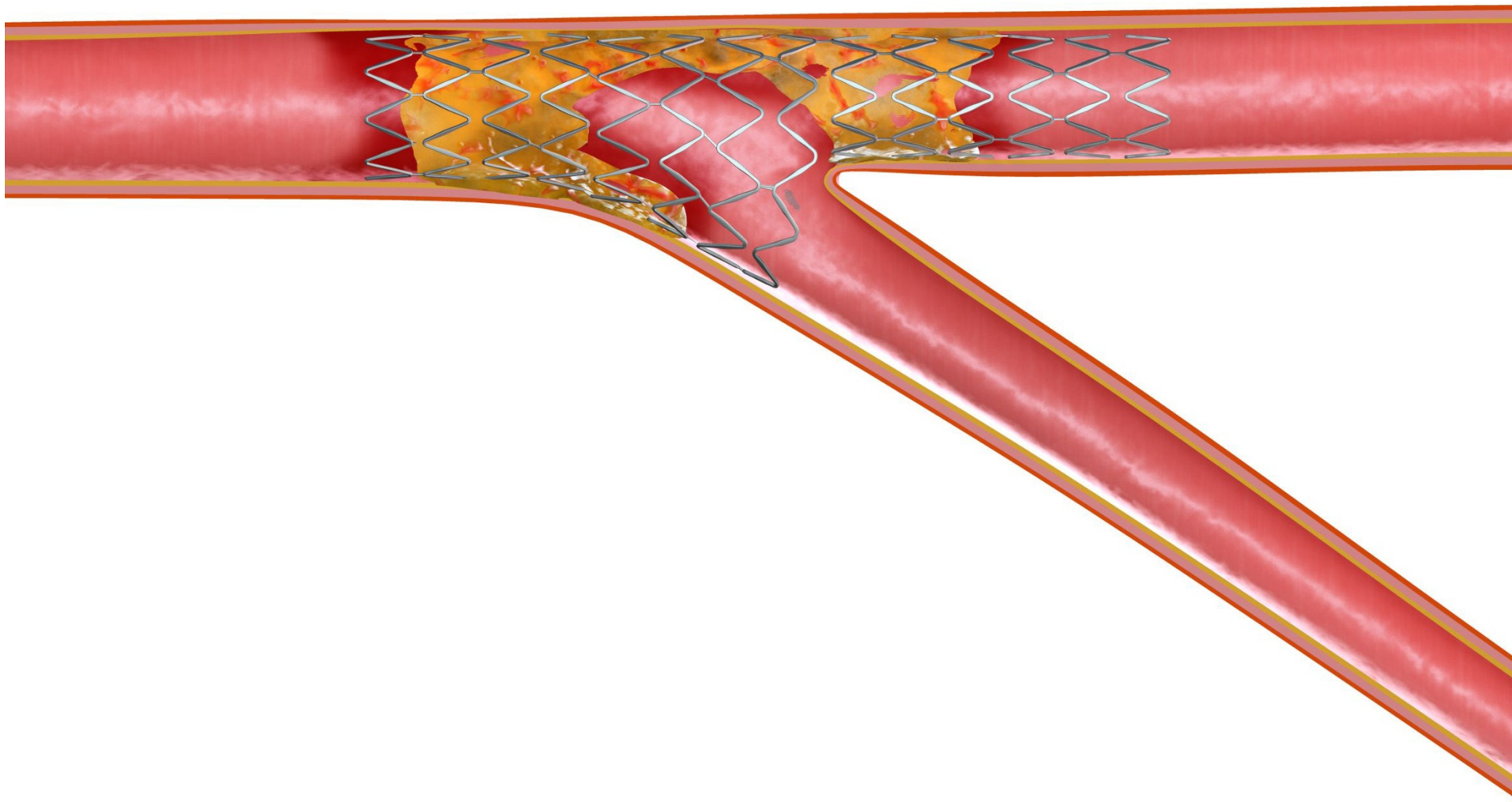


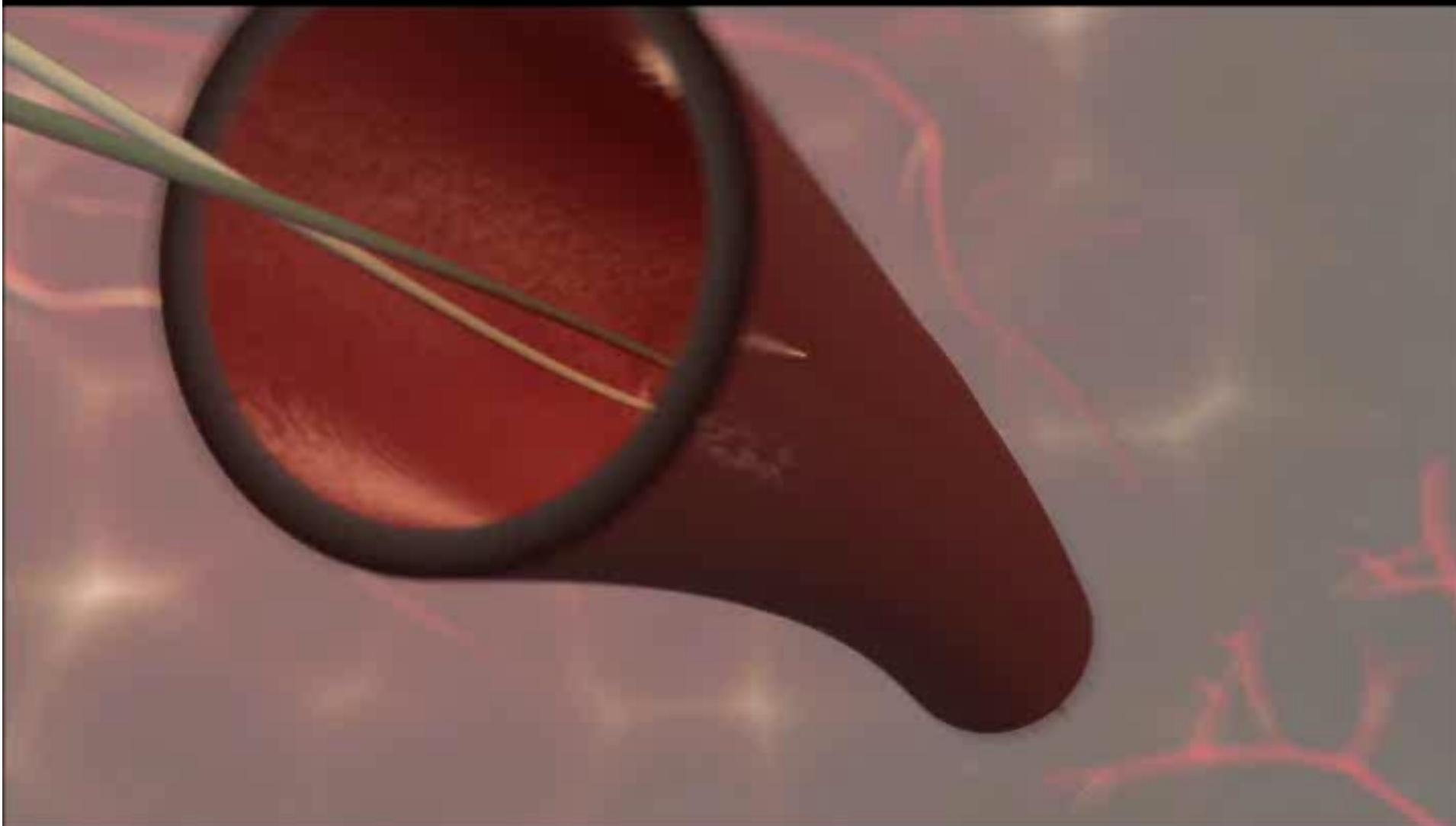














## NILE STENT : Major advantages

- ◆ Dedicated stent for provisional treatment of bifurcation lesions.
- ◆ Excellent coverage of the side branch ostium.
- ◆ Low stent profile.
- ◆ A low profile delivery system.
- ◆ 6F compatibility.
- ◆ If double stenting is needed, additional stent deployment at the ostium of the side branch is easy to perform (T or TAP technique).

## NILE STENT : Technique

- ◆ Predilatation of the main branch lesion is mandatory.
- ◆ Repositioning of wires (main or side branch) is easy to perform.
- ◆ Good positioning of the mid-marker on the carena is essential.
- ◆ The position must be maintained during stent deployment.
- ◆ Final kissing balloon inflation is mandatory and easy to perform.
- ◆ If needed, additional stent placement in the side branch will be performed with a deflated balloon left in the main branch followed by a final kissing balloon.

# Nile®

# Pax

Paclitaxel Elution

**The Ultimate Paclitaxel  
Bifurcation System**



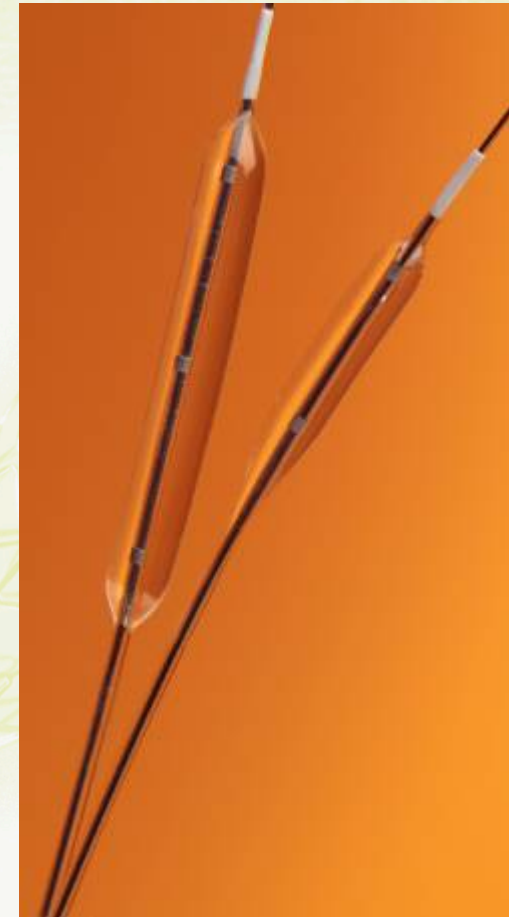
## NILE PAX

◆ 1<sup>er</sup> Stent à élution médicamenteuse  
dédié aux TRT des bifurcations coronariennes.



# Dedicated Delivery Device

- 2 independent Rx PTCA catheters
- Ultra-low profile balloon combination.
- Side branch balloon already engaged.
- Specific side branch balloon shape.
- Peel-away onto catheter shaft.
- 6F compatible even on 3.5/3.0 sizes.



# Dedicated Bifurcation Stent

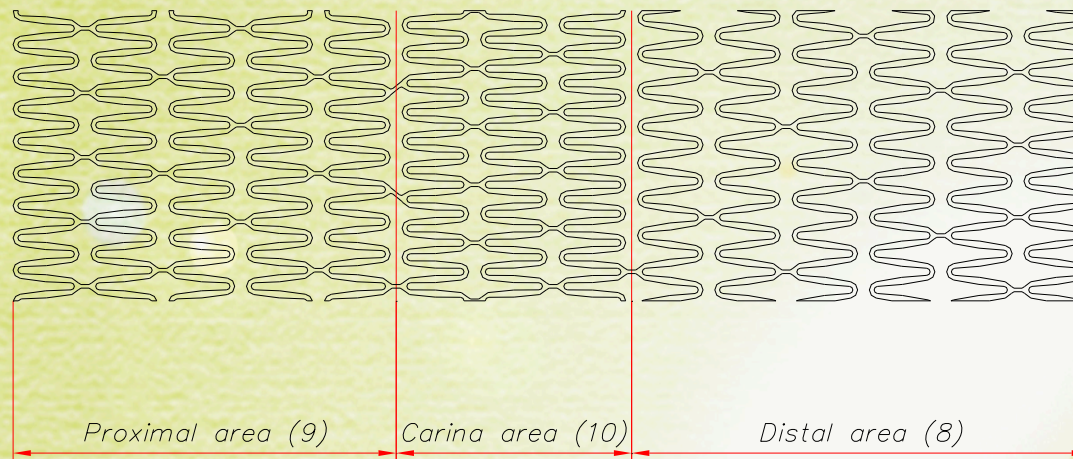
- Chromium Cobalt stent.
- 73 $\mu$  stent thickness.
- Modular stent design for allowing carina coverage without cell's overstretching.
- No angulations' restriction



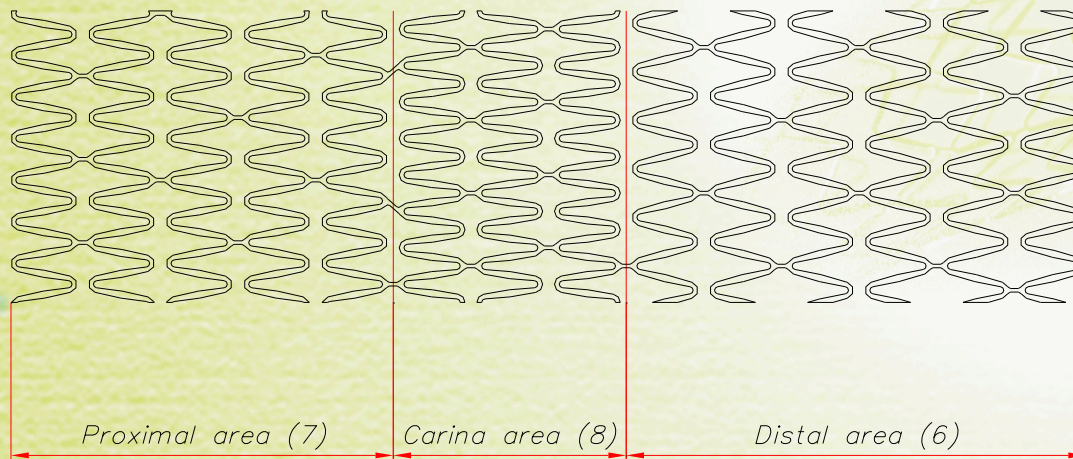


# Dedicated Bifurcation Stent

- **Design 1 : 8 cells distal, 10 carina, 9 proximal for vessels of 3.0 & 3.5mm**



- **Design 2 : 6 cells distal, 8 carina, 7 proximal for vessels of 2.5mm**



## NILE PAX

- ◆ Absence de polymère.
- ◆ Elution de Paclitaxel  
- revêtement abluminal.
- ◆ 8<sup>ème</sup> jour : 60 % de la dose délivrée.
- ◆ 45<sup>ème</sup> jour : 100 % de la dose délivrée  
- retour à un Stent Cobalt -Chrome nu.



## NILE / TAKE HOME MESSAGES

- ◆ Dispositif compatible 6F.
- ◆ Pré dilatation impérative du vaisseau mère.

# Complex Coronary Bifurcation Lesions Treated with the Novel Polymer-Free Dedicated Bifurcation Paclitaxel-Eluting Stent (Nile Pax): 9-Month Clinical and Angiographic Results of the Prospective, Multicenter BIPAX Clinical Trial

*Ricardo A. Costa, Alexandre Abizaid, Andrea Abizaid, Bruno Garcia, Jacques Berland, Ivo Petrov, Philippe Brenot, Patrick Serruys, Paolo Rubino, Thierry Royer, Maciej Lasiak, Jean Fajadet, for the BIPAX Investigators*

**Oral Abstracts: Left Main and Bifurcation PCI – Room 121  
Tuesday, November 8<sup>th</sup> , 2011 – From 12:12 to 12:22 pm**



INSTITUTO DANTE PAZZANESE  
de Cardiologia

**TCT 2011 – San Francisco, CA**



CARDIOVASCULAR  
RESEARCH CENTER

# BIPAX Trial Design

- Prospective, non-randomized, single-arm, multicenter clinical evaluation of the novel Nile PAX bifurcation dedicated drug-eluting stent system
- **Principal Investigator:** *Jean Fajadet, MD* – Clinique Pasteur, Toulouse, France
- **Enrollment:** 101 pts at 10 sites in Europe / South America
- **Clinical follow-up:** 1, 6, 9, and 12 months and yearly up to 5 yrs. Angiographic follow-up (mandatory): 9 months
- **Data Center/CEC:** Cardiovascular Research Center, São Paulo, Brazil – Director, *Andrea Abizaid, MD, PhD*
- **Angiographic Core Lab:** Cardiovascular Research Center, São Paulo, Brazil – Director, *Ricardo A. Costa, MD, PhD*
- **Sponsor:** Minvasys SAS, Gennevilliers, France



# Key Exclusion Criteria

- Bifurcation lesion type with single involvement of the SB ostium (Medina 0,0,1)
- LM location
- Heavy calcification
- Severe tortuosity
- LVEF <30%
- Baseline serum creatinine level  $\geq 2.0$  mg/dL
- AMI <72 hours
- PCI in non-target vessel <30 days
- Known hypersensitivity or contraindication to aspirin or thienopyridine





# Endpoints

- **Primary endpoint:**

- Angiographic binary restenosis in the treated lesion (MB and SB) at 9 months angiographic follow-up, as assessed by independent QCA analysis

- **Secondary endpoints:**

- Acute success
- Late lumen loss at 9 months follow-up
- MACE, TVR and TVF at all study timepoints
- Ischemia-driven TLR (secondary endpoint)



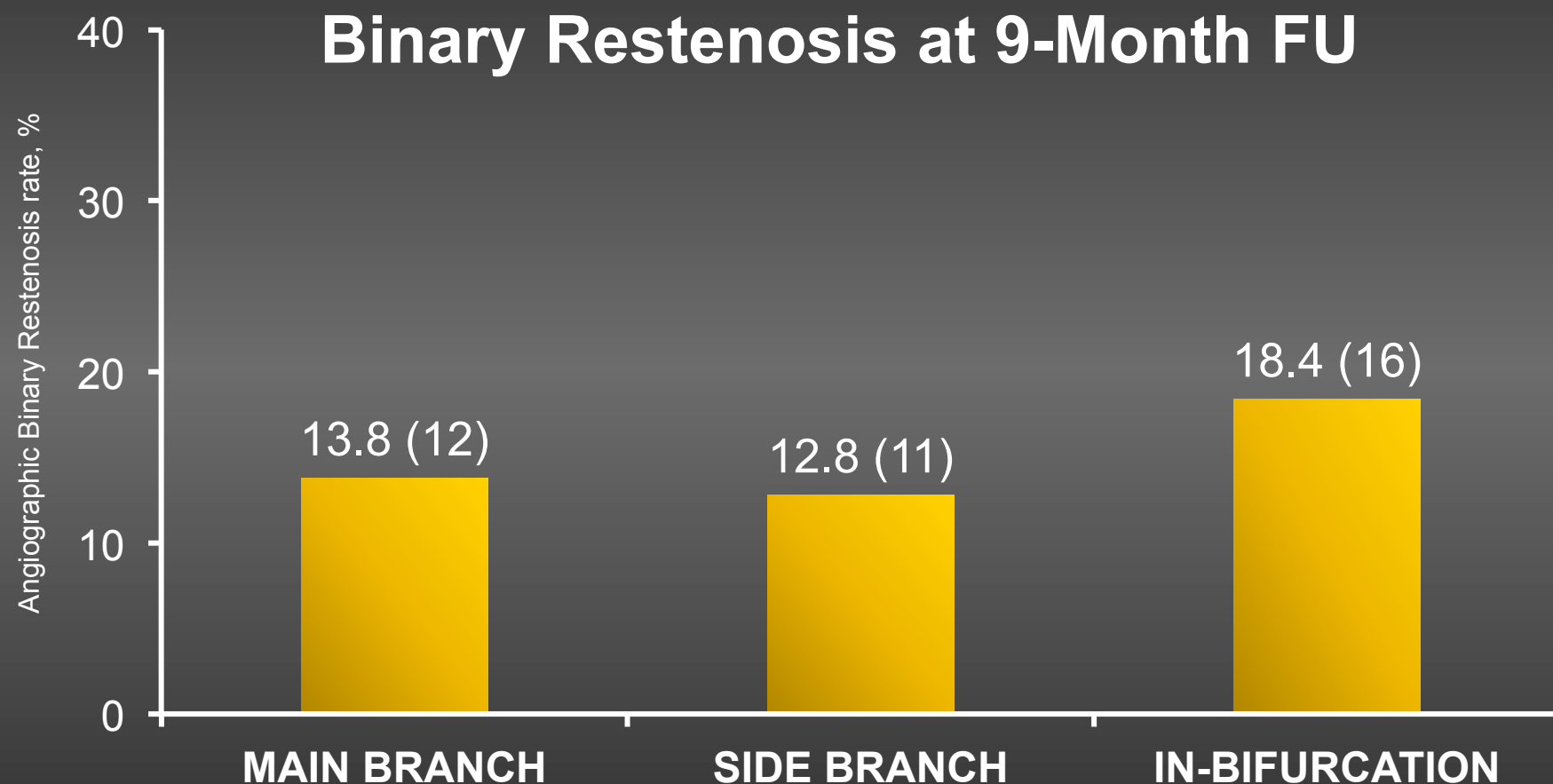
# Procedural Outcomes

VARIABLE	N=101 (102 lesions)
Radial access (6-Fr.)	43% (43)
IIb/IIIa inhibitor use	4% (4)
Predilatation MB / SB	95% (97) / 35% (36)
Wire “tangling” / solved	41% (42) / 40 of 42
Study stent implanted	99% (101)
Stent implanted in SB (Delta PAX)	26% (26)
Single postdilatation MB / SB	27% (27) / 17% (17)
Final kissing-balloon inflation	93% (95)
Device success	98% (100)
Lesion success	98% (100)
Procedural success	97% (98)



# Primary Endpoint – PPP

N=87



# 12-Month Clinical Outcomes, PPP

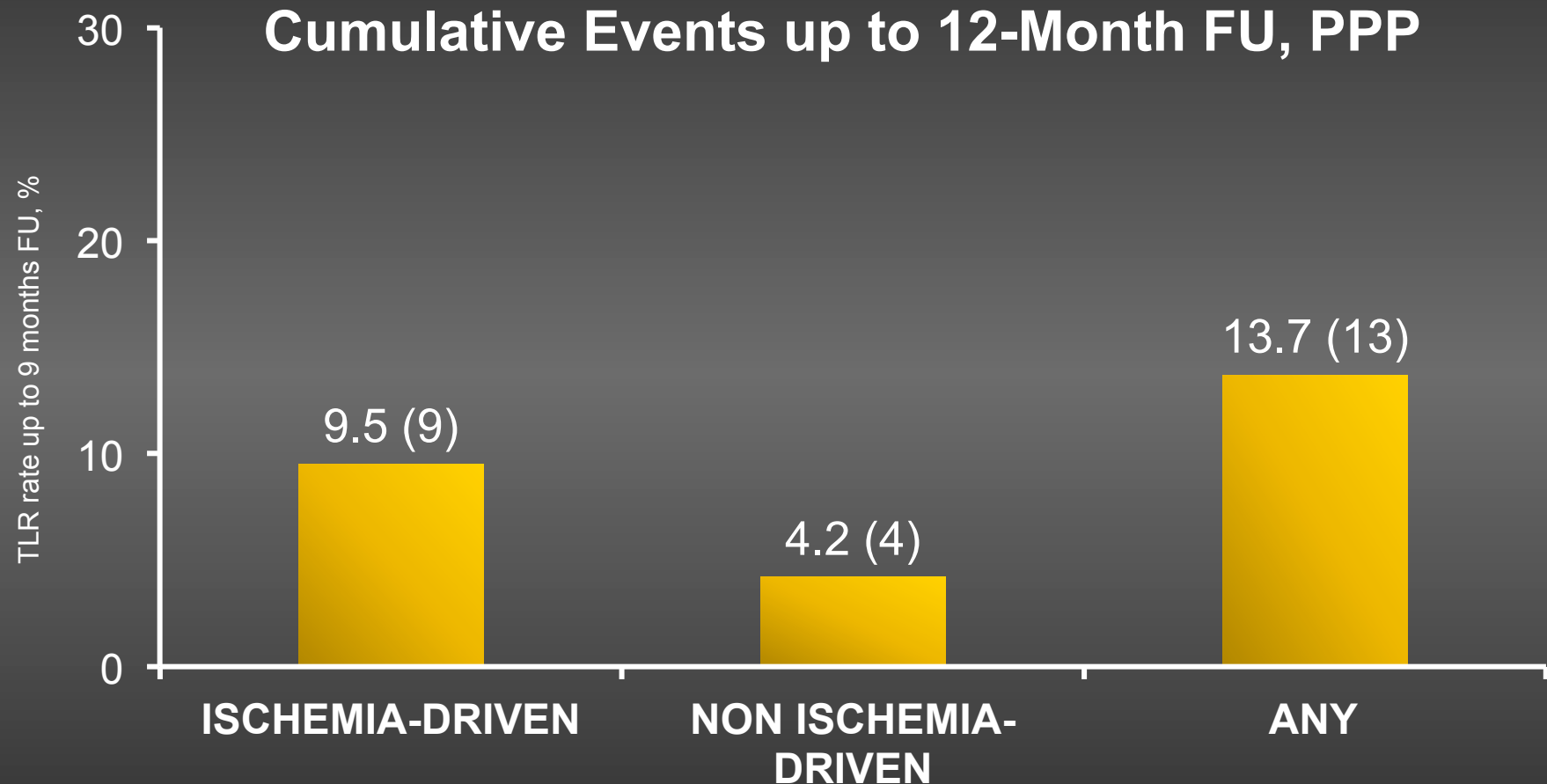
EVENT, N=95	IH	30-Day*	6-Mo.*	9-Mo.*	12-Mo.*
Death					
Cardiac	0% (0)	0% (0)	0% (0)	1.1% (1)	1.1% (1)
Non-cardiac	1.1% (1)	0% (0)	0% (0)	0% (0)	0% (0)
MI					
Q wave	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)
Non-Q wave	0% (0)	0% (0)	1% (1)	1% (1)	1% (1)
TLR	0% (0)	0% (0)	4.2% (4)	12.6% (12)	13.7% (13)
TVR	0% (0)	0% (0)	4.2% (4)	12.6% (12)	13.7% (13)
ST	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)





# Target Lesion Revascularization

N=95



# Conclusions

- The Nile PAX dedicated DES demonstrated excellent acute results for bifurcation PCI with a provisional approach, including high device, lesion and procedural success despite significant involvement of both branches in the majority of lesions (>60%)
- Overall, there were no safety concerns including low rates of death and MI (<2%) and absence of stent thrombosis up to 12 months follow-up
- In those meeting inclusion criteria (94%), binary restenosis rates at 9 months in the MB and SB were 13.8% and 12.8%, respectively (primary endpoint), with overall in-bifurcation restenosis of 18.4%. Furthermore, cumulative ischemia-driven TLR rate was 9.5% (secondary endpoint)

