

MEET 2015, Nice



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# STATE OF THE ART : The use of DES in BTK disease

Koen Deloose, MD

## DES – BTK in literature...

Primary Patency

Mean lesion length  $\leq$  35 mm ...  
what in longer lesions??

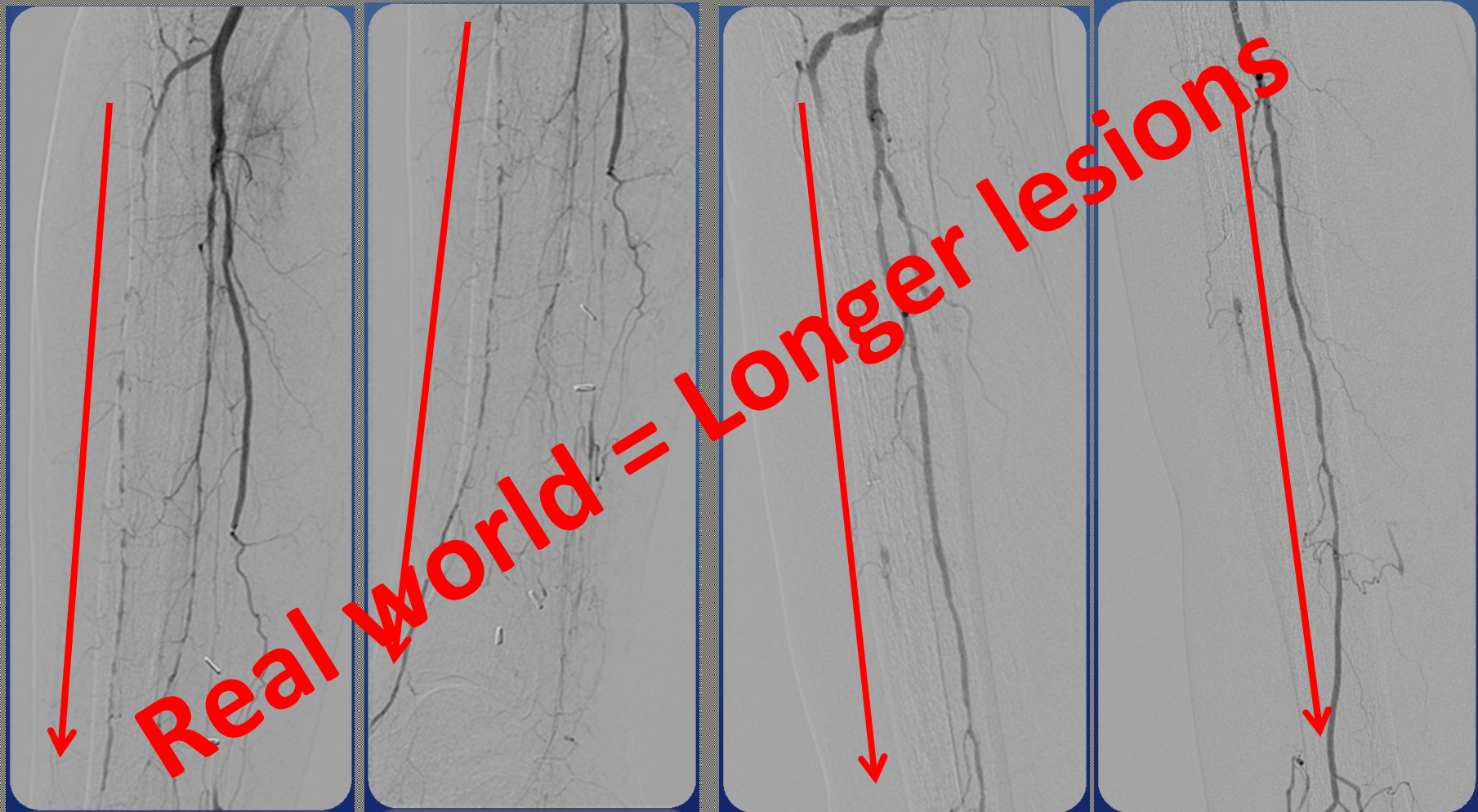
RMS/PTA SES

Balloon expandable stents... room for  
self expanding stents??

Only –limus devices...PTX devices as  
successful as in the SFA??

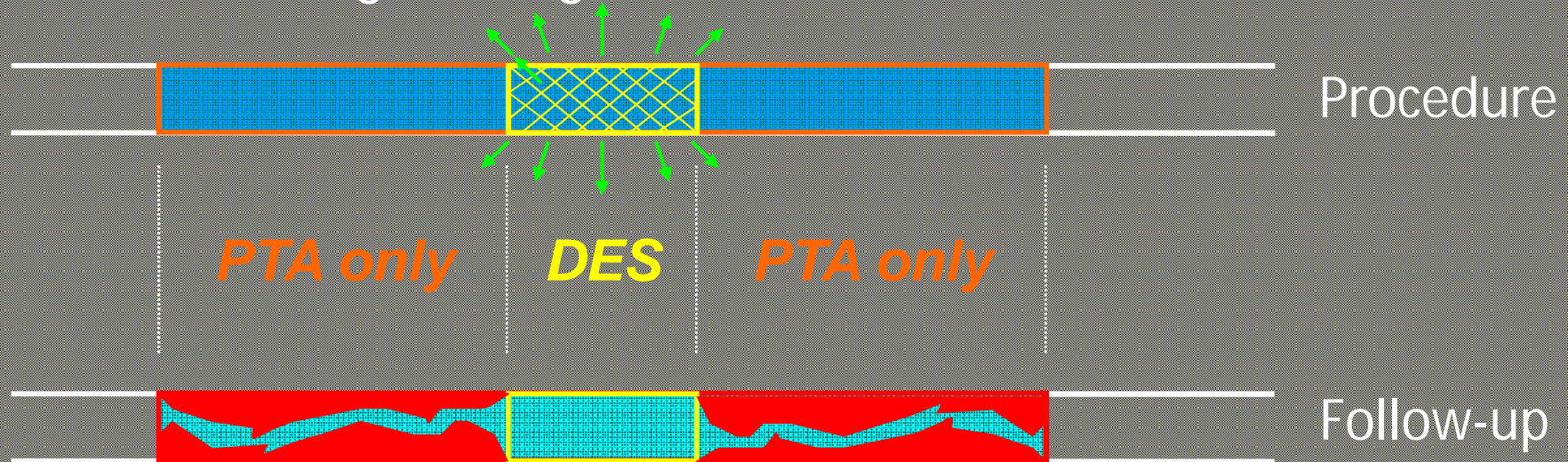
Time (months)

Mean lesion length  $\leq$  35 mm ...  
what in longer lesions??

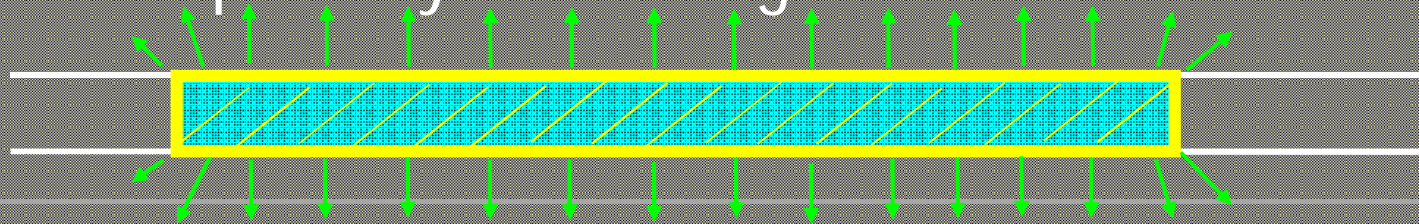


# Mean lesion length $\leq 35$ mm ... what in longer lesions??

Drug eluting stents: treatment effect



- Long term **vessel patency** is limited by patency rate of segment treated with PTA only



# Mean lesion length $\leq$ 35 mm ... what in longer lesions??

- Coronary DES trials showed
  - Inadequate lesion coverage may contribute to edge stenosis
  - Increased risk for restenosis if **full index lesion** is not completely **covered** by DES

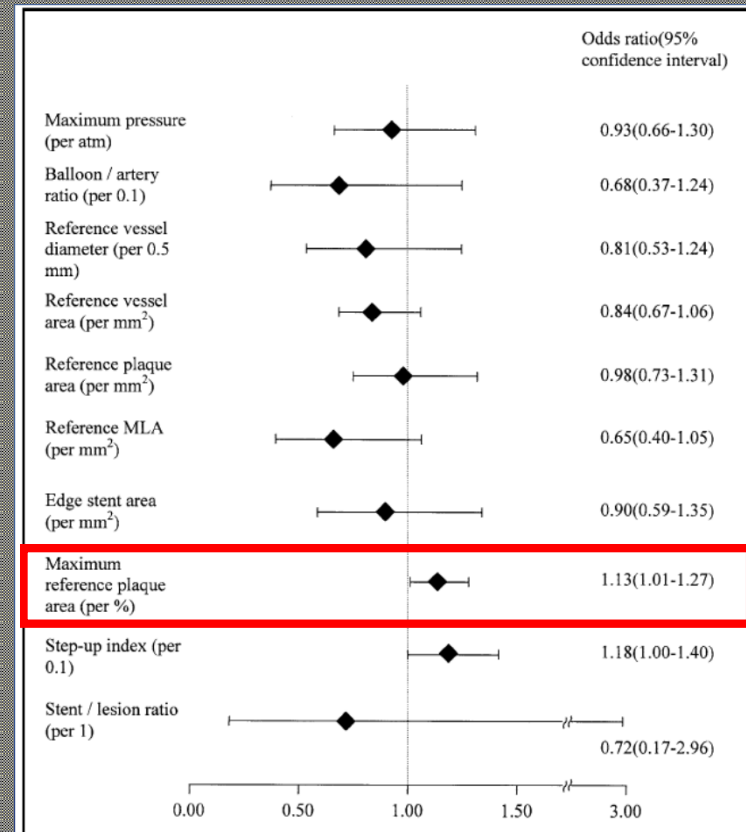
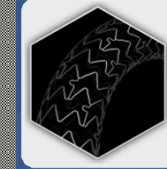
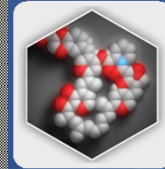


Figure 1. Odds ratios and 95% confidence intervals for edge stenosis in the SES cohort according to baseline procedural, angiographic, and IVUS parameters derived from the univariate logistic regression analysis. MLA = minimum lumen area.

# Mean lesion length $\leq$ 35 mm ... what in longer lesions??

## DESTINY 2 study



- Prospective, non-randomized, multi-center study  
(4 Belgian, 3 German, 1 Australian center)
- Study objective:  
To evaluate the immediate and long-term (up to 12 months) outcome of the XIENCE PRIME BX Everolimus-Eluting Coronary Stent System (Abbott Vascular) in a controlled prospective investigation for **lesions between 30mm and 100mm**

# Mean lesion length $\leq 35$ mm ... what in longer lesions??

## Timeline

	proc	disch	1 M	6 M	12 M
Medication	■	■	■	■	■
Physical examination			■	■	■
Rutherford			■	■	■
ABI		■	■	■	■
Core Lab Angiography	■				■
Core Lab Ultrasound			■	■	■
Core Lab X-ray	■				■

# Mean lesion length $\leq$ 35 mm ... what in longer lesions??

## Patient demographics

N=60

Male (%)

41 (68.3%)

Age (min – max;  $\pm$ SD)

75.13 (24 – 93  $\pm$ 12.73)

Nicotine abuse (%)

21 (35.0%)

Hypertension (%)

45 (66.7%)

**Diabetes mellitus (%)**

**30 (50.0%)**

Renal insufficiency (%)

23 (38.3%)

Hypercholesterolemia (%)

29 (48.3%)

Obesity (%)

20 (33.3%)



# Mean lesion length $\leq$ 35 mm ... what in longer lesions??

## Lesion characteristics

N=60

Left/Right limb (%)

31 (51.7%) / 28 (46.7%)

**Lesion length** (min - max;  $\pm$ SD)

**47.4 mm** (35.0 - 100.0;  $\pm$ 25.06)

Reference vessel diameter

3.09 mm

Mean lumen diameter

0.32 mm

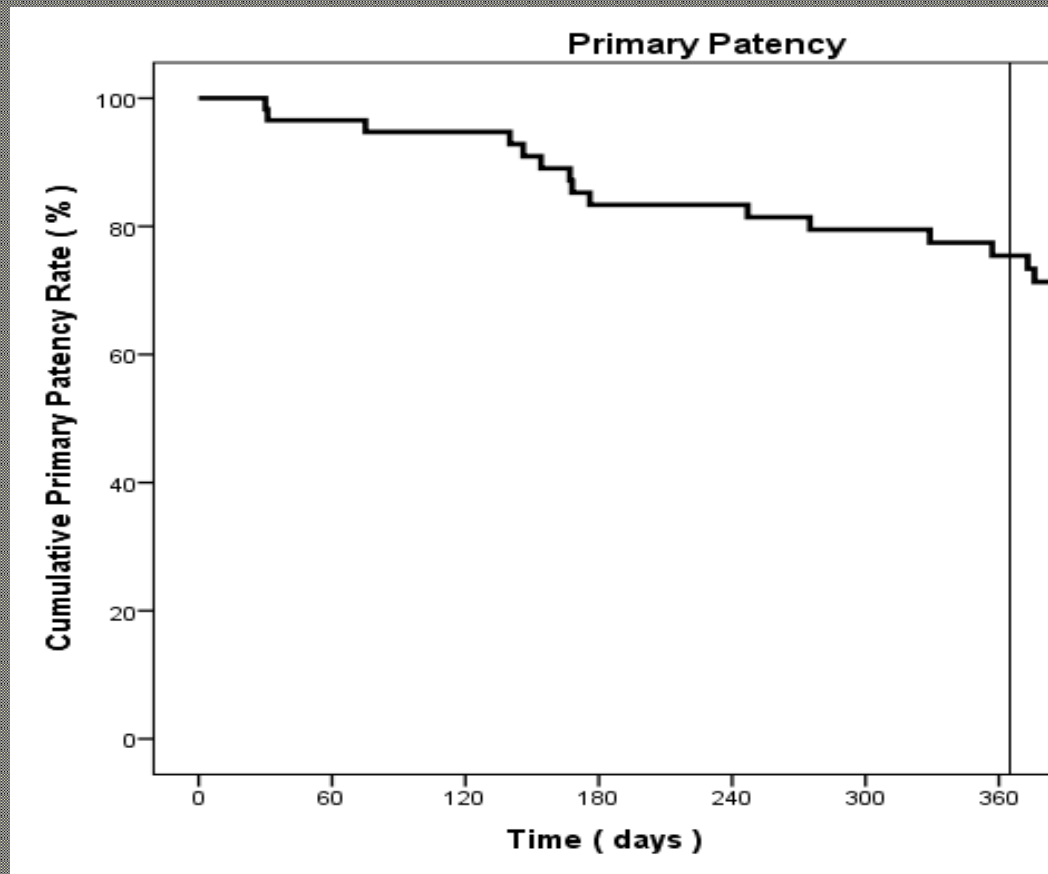
Occlusion (%)

32 (53.3%)

Calcified lesion (%)

27 (45.0%)

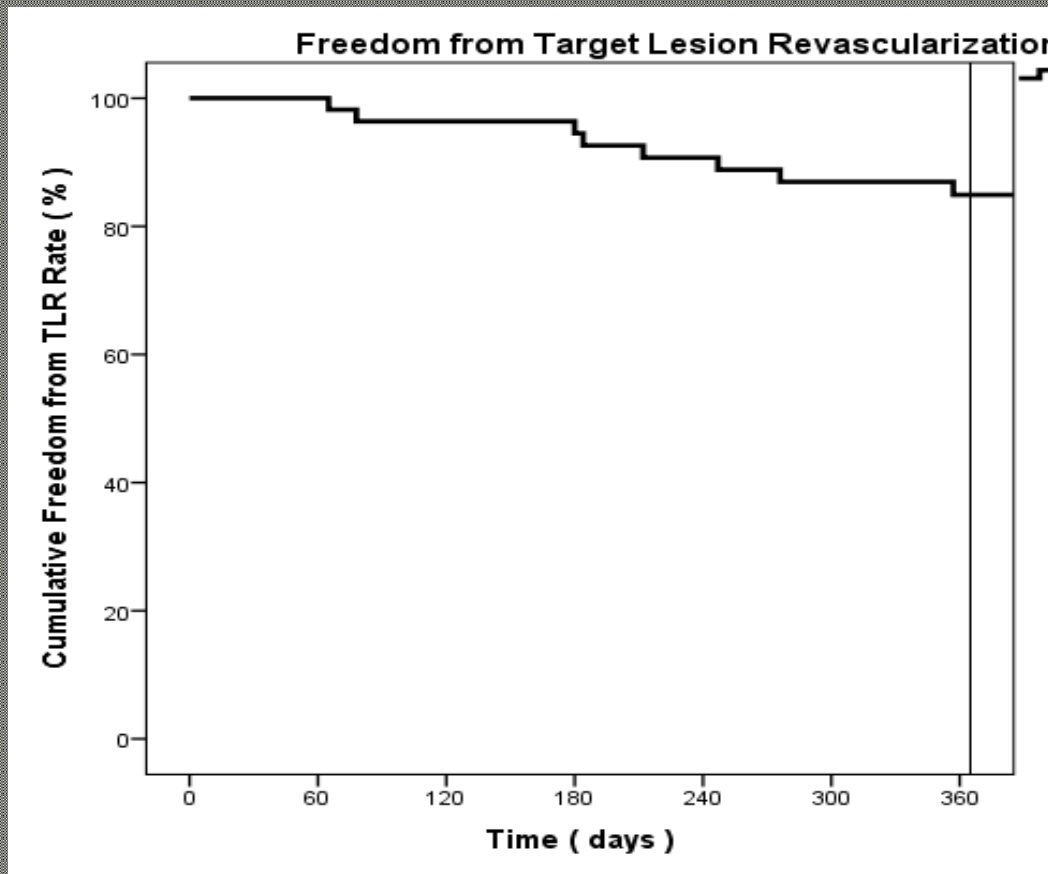
# Mean lesion length $\leq 35$ mm ... what in longer lesions??



**75.4 %**

time	baseline	1MFU	6MFU	12MFU
at risk	60	57	43	37
%	100	98.3	83.4	75.4

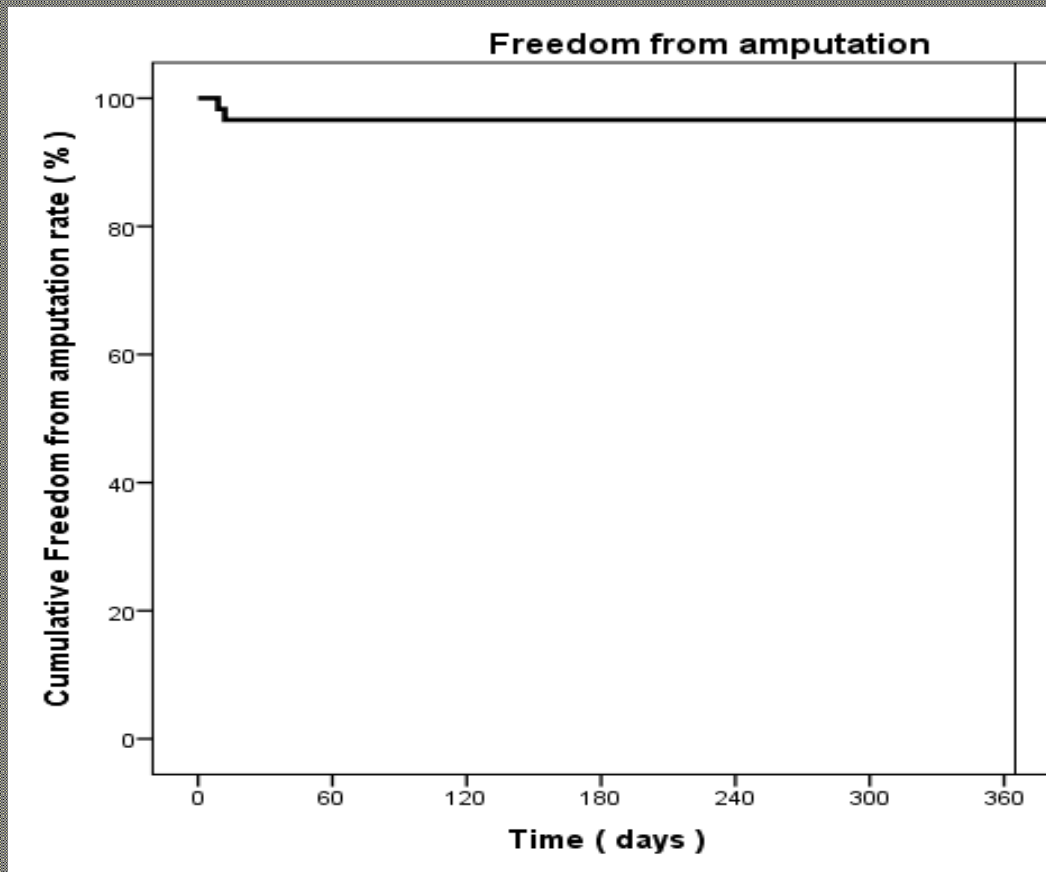
# Mean lesion length $\leq 35$ mm ... what in longer lesions??



**84.9 %**

time	baseline	1MFU	6MFU	12MFU
at risk	60	58	50	42
%	100	100	94.5	84.9

# Mean lesion length $\leq 35$ mm ... what in longer lesions??

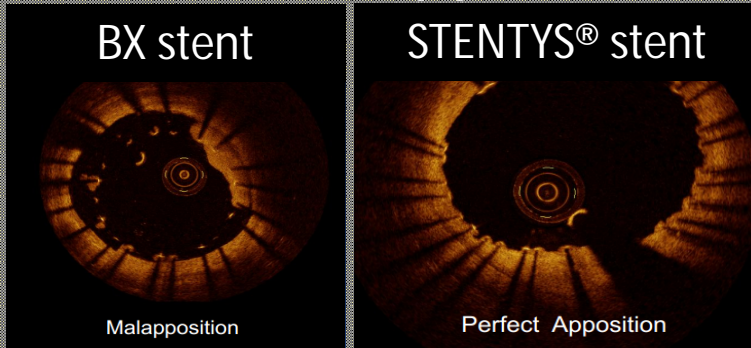


**96.6 %**

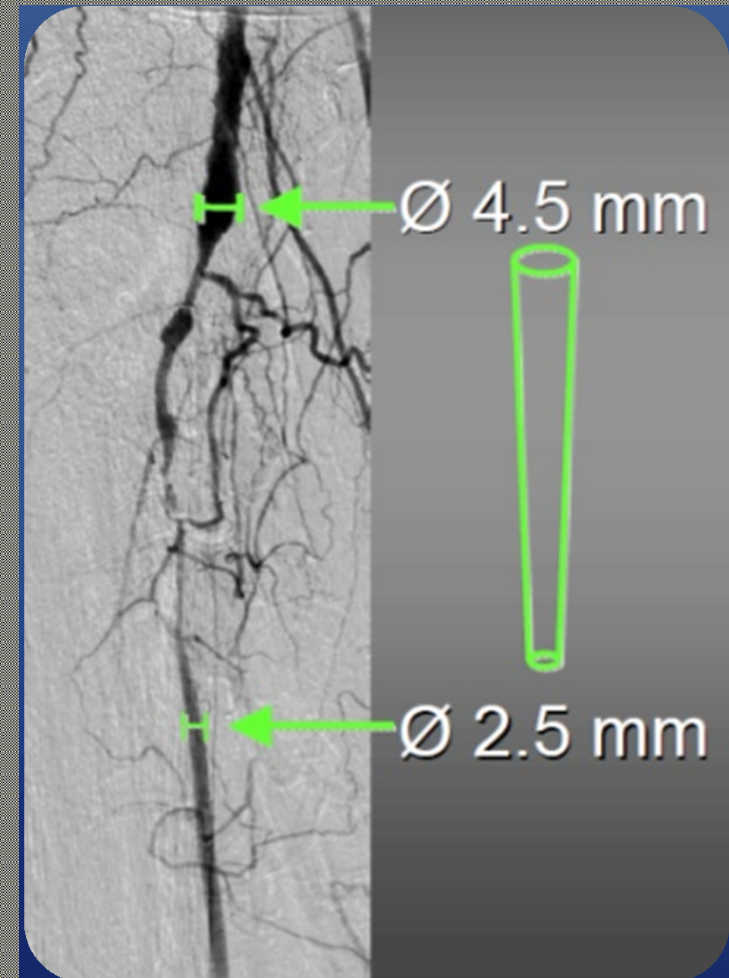
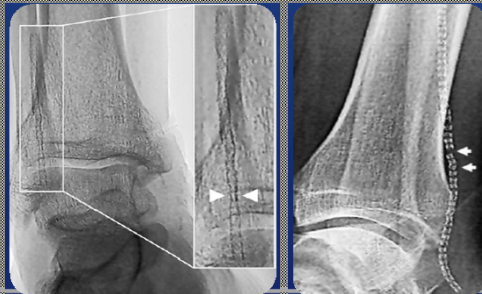
time	baseline	1MFU	6MFU	12MFU
at risk	60	57	52	49
%	100	96.6	96.6	96.6

# Room for self expandable PTX eluting stents??

- Better vessel conformability
- Higher flexibility
- Perfect wall appositioning



- Crush avoidance

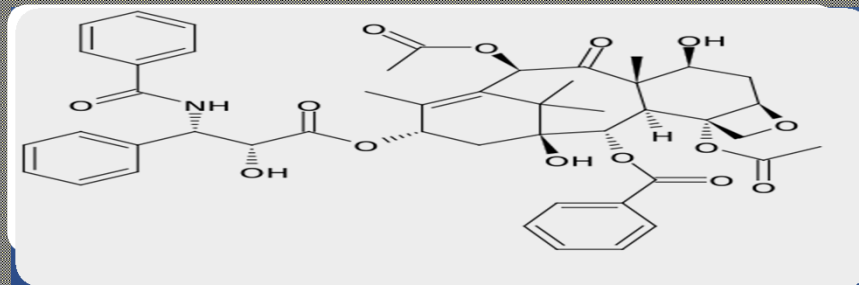


# Room for self expandable PTX eluting stents??

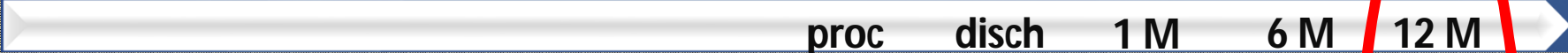
## PES BTK-70 study

Prospective, non-randomized, multi-center study  
(5 belgian centers)

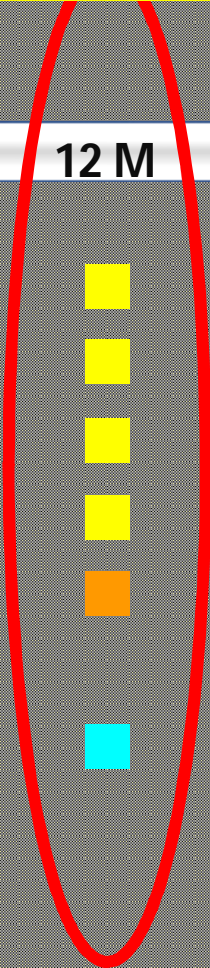
To evaluate the **immediate and long-term (up to 12 months) outcome** of the dedicated BTK SX Paclitaxel-Eluting (polysulfone polymer) Stentys Stent System in **< 50 mm lesions**



# Room for self expandable PTX eluting stents??



	proc	disch	1 M	6 M	12 M
Medication	■	■	■	■	■
Physical examination			■	■	■
Rutherford			■	■	■
ABI		■	■	■	■
Core Lab Angiography	■				■
Core Lab Ultrasound				■	
Standard Ultrasound		■	■		■



# Room for self expandable PTX eluting stents??

## Patient demographics

	N=70
Male (%)	45 (64.3%)
Age (min - max; ±SD)	74.64 (45 - 92; ±9.44)
Nicotine abuse (%)	10 (14.3%)
Hypertension (%)	46 (65.7%)
Diabetes mellitus (%)	28 (40.0%)
Renal insufficiency (%)	7 (10.0%)
Hypercholesterolemia (%)	30 (42.9%)
Obesity (%)	11 (15.7%)
Rutherford 4 (%)	37 (52.9%)
Rutherford 5 (%)	33 (47.1%)

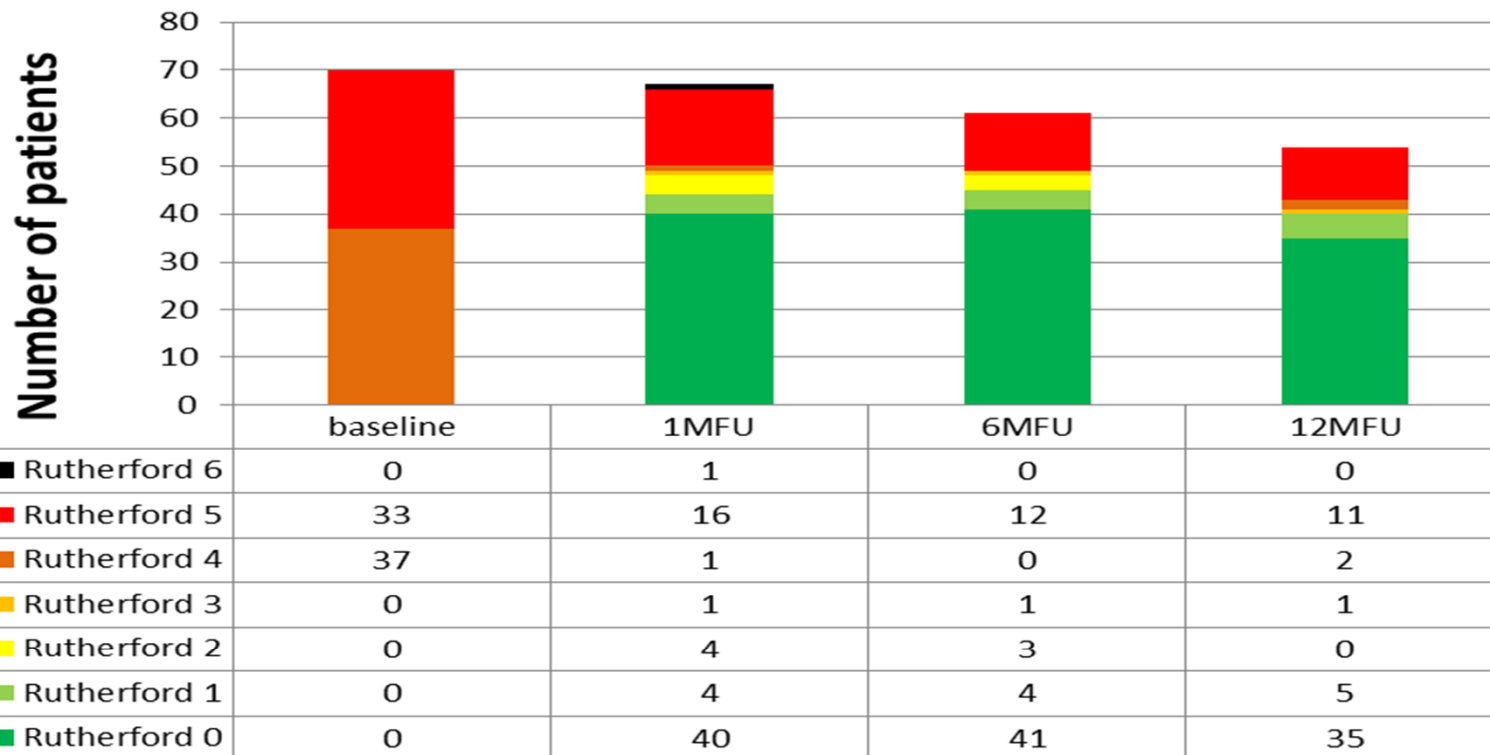


# Room for self expandable PTX eluting stents??

## Lesion characteristics

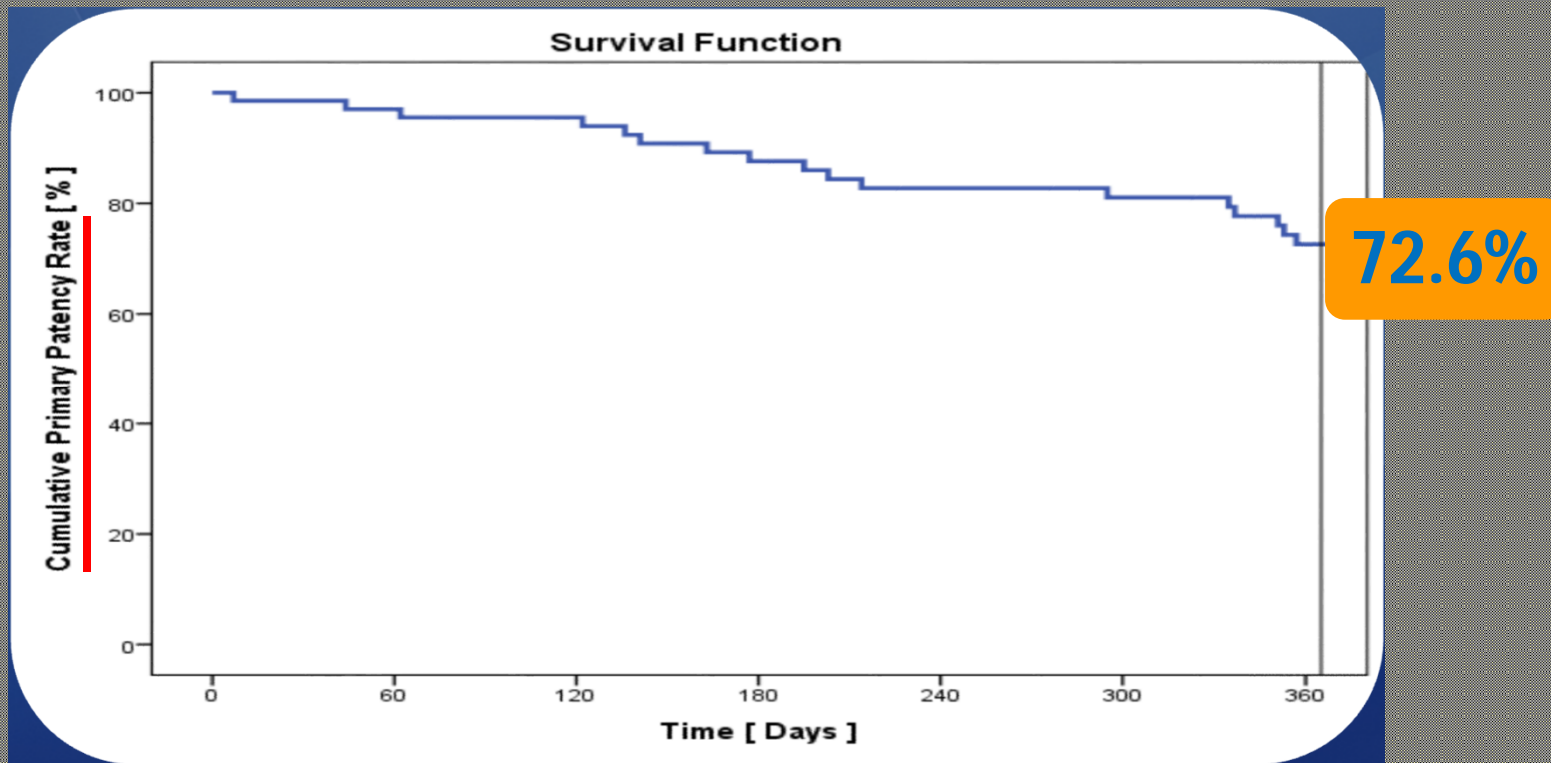
	N=70
Left/Right limb (%)	39 (55.7%) / 31 (44.3%)
<b>Lesion length</b>	<b>19.7 mm</b>
Occlusion (%)	10 (14.3%)
Calcified lesion (%)	43 (61.4%)
Presence of thrombus (%)	2 (2.9%)
Technical and procedural Success (%)	68 (97.14%)

# Room for self expandable PTX eluting stents??



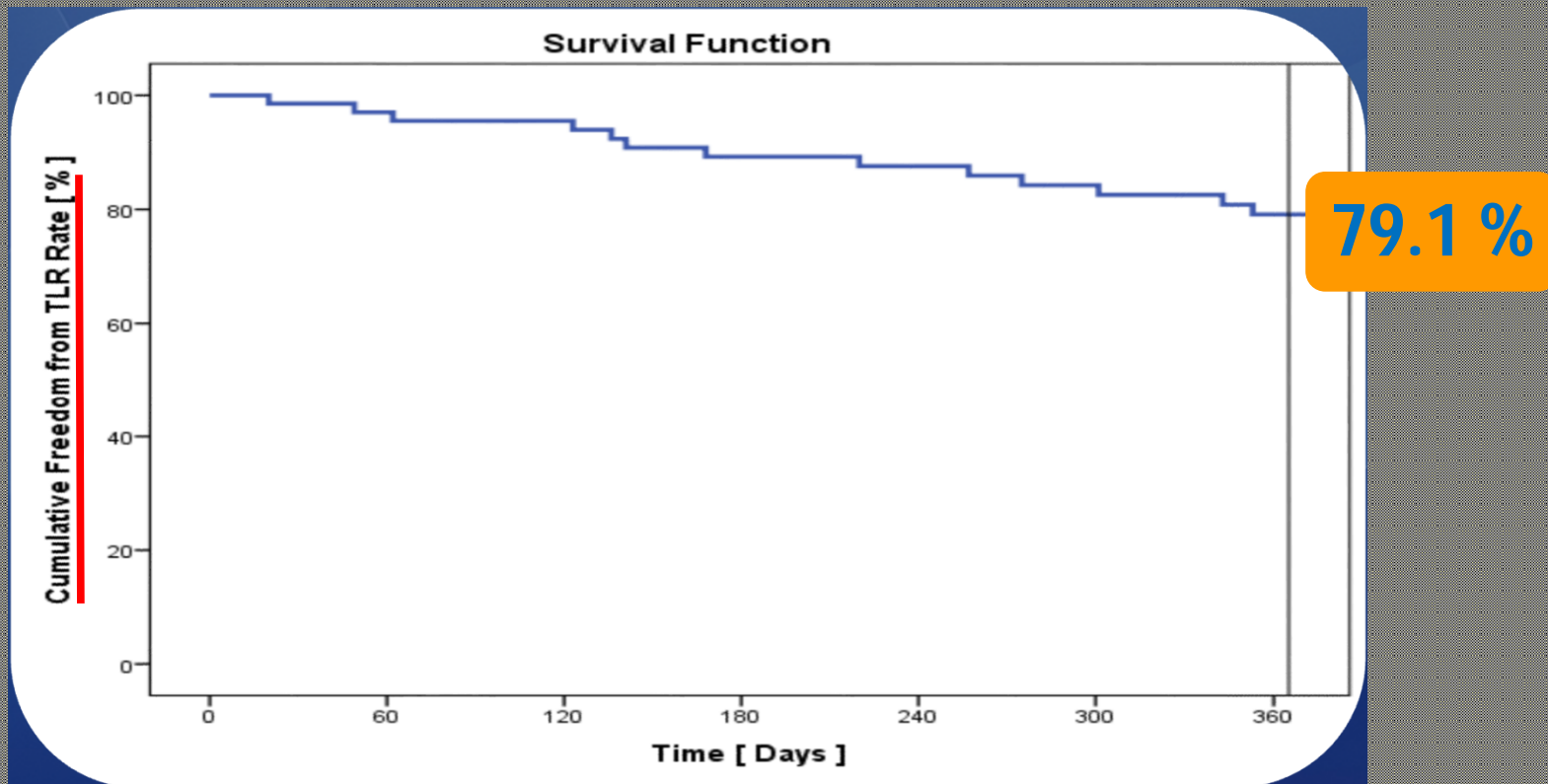
■ Rutherford 0	0	40	41	35
■ Rutherford 1	0	4	4	5
■ Rutherford 2	0	4	3	0
■ Rutherford 3	0	1	1	1

# Room for self expandable PTX eluting stents??



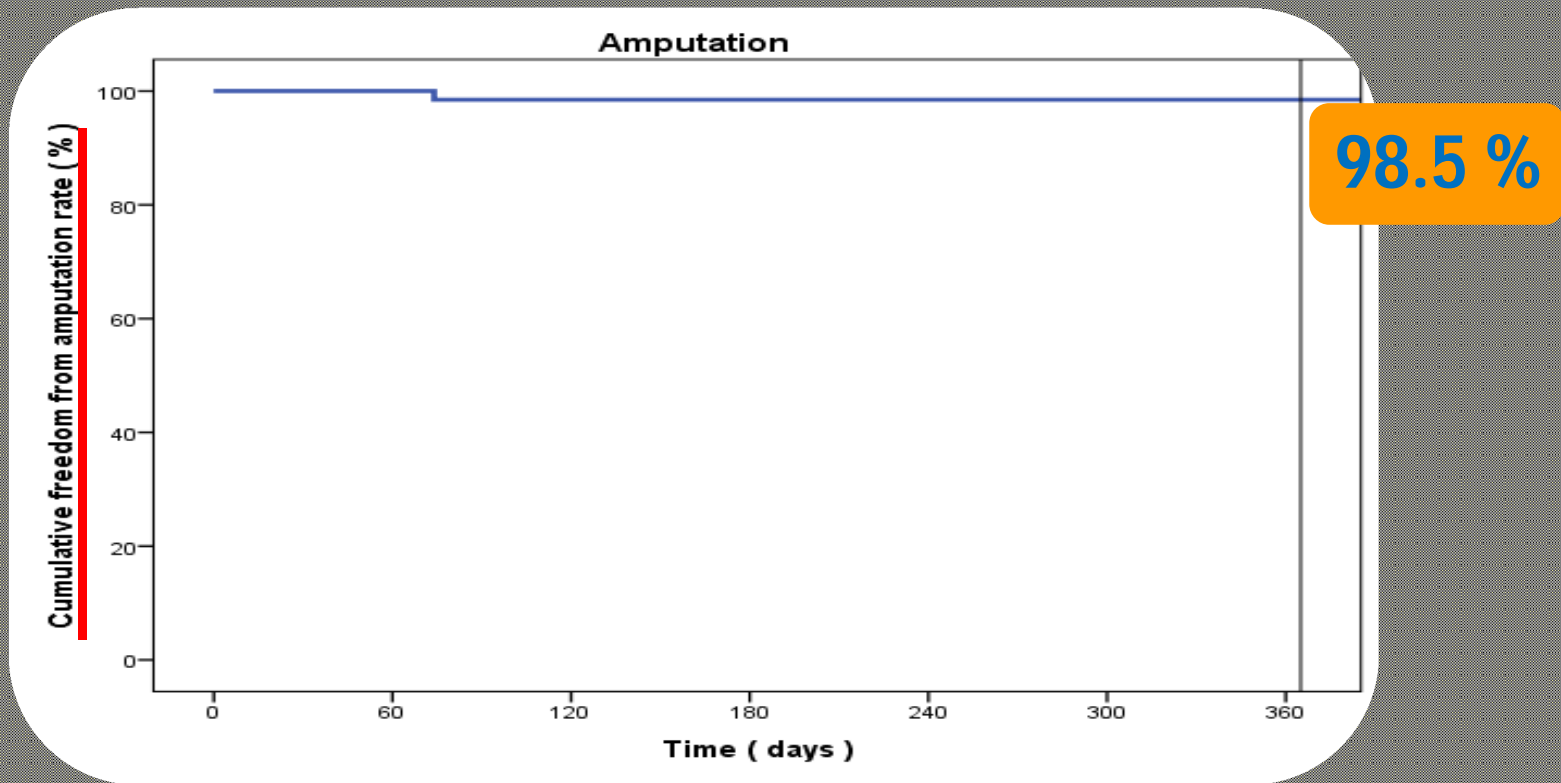
time	baseline	6MFU	12MFU
at risk	70	54	43
%	100	87.6	72.6

# Room for self expandable PTX eluting stents??



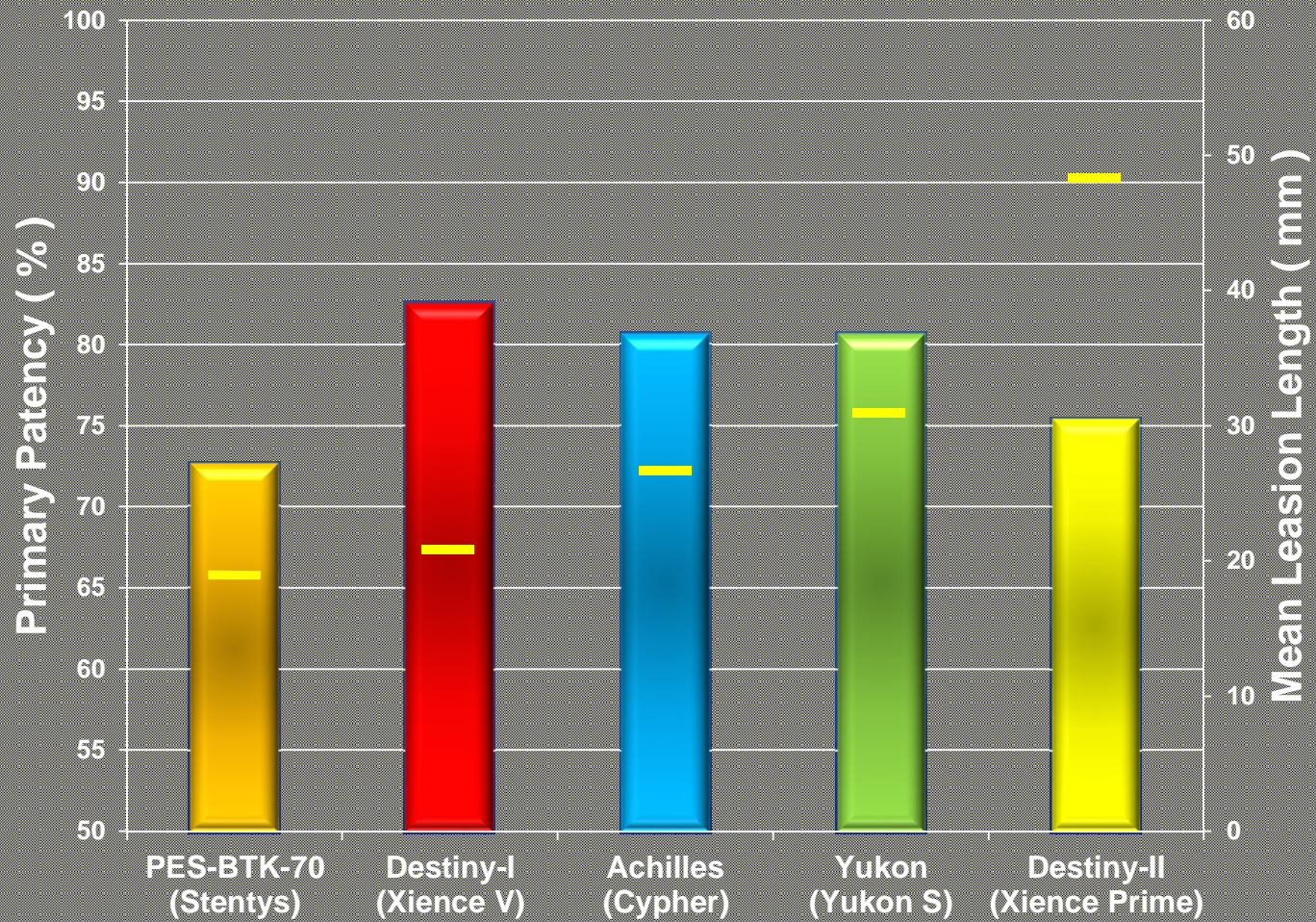
time	baseline	6MFU	12MFU
at risk	70	55	46
%	100	89.2	79.1

# Room for self expandable PTX eluting stents??



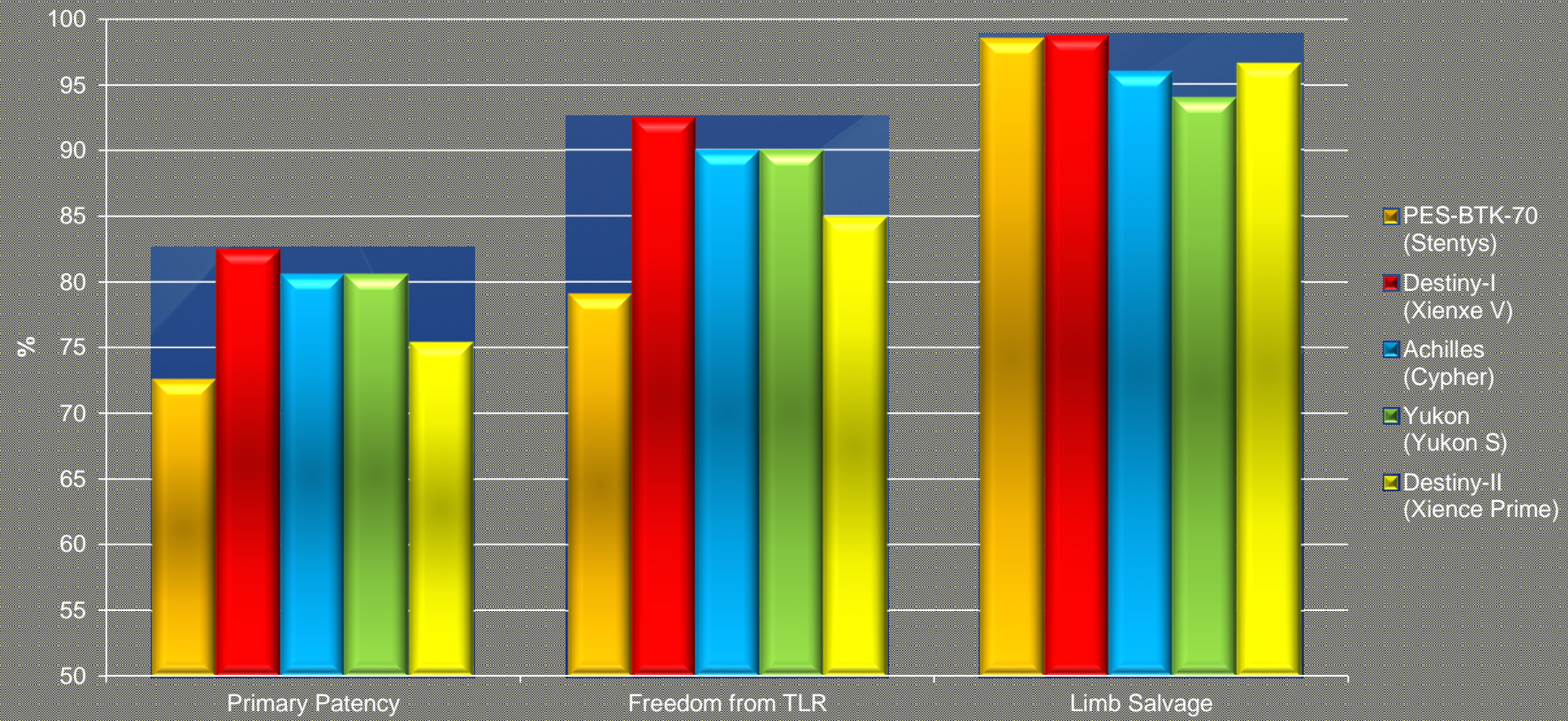
time	baseline	6MFU	12MFU
at risk	70	62	55
%	100	98.5	98.5

# Overview DES in BTK disease



# Overview DES in BTK disease

## 1 Year Outcomes



## Conclusion

- There is evidence for DES in the CLI-BTK area.
- -limus eluting stents have proven already their role in focal BTK lesions
- Destiny 2 add longer lesion indications (up to 10 cm) with the same outcome
- Also SX PTX dedicated BTK stents might play a role in this CLI-BTK area.