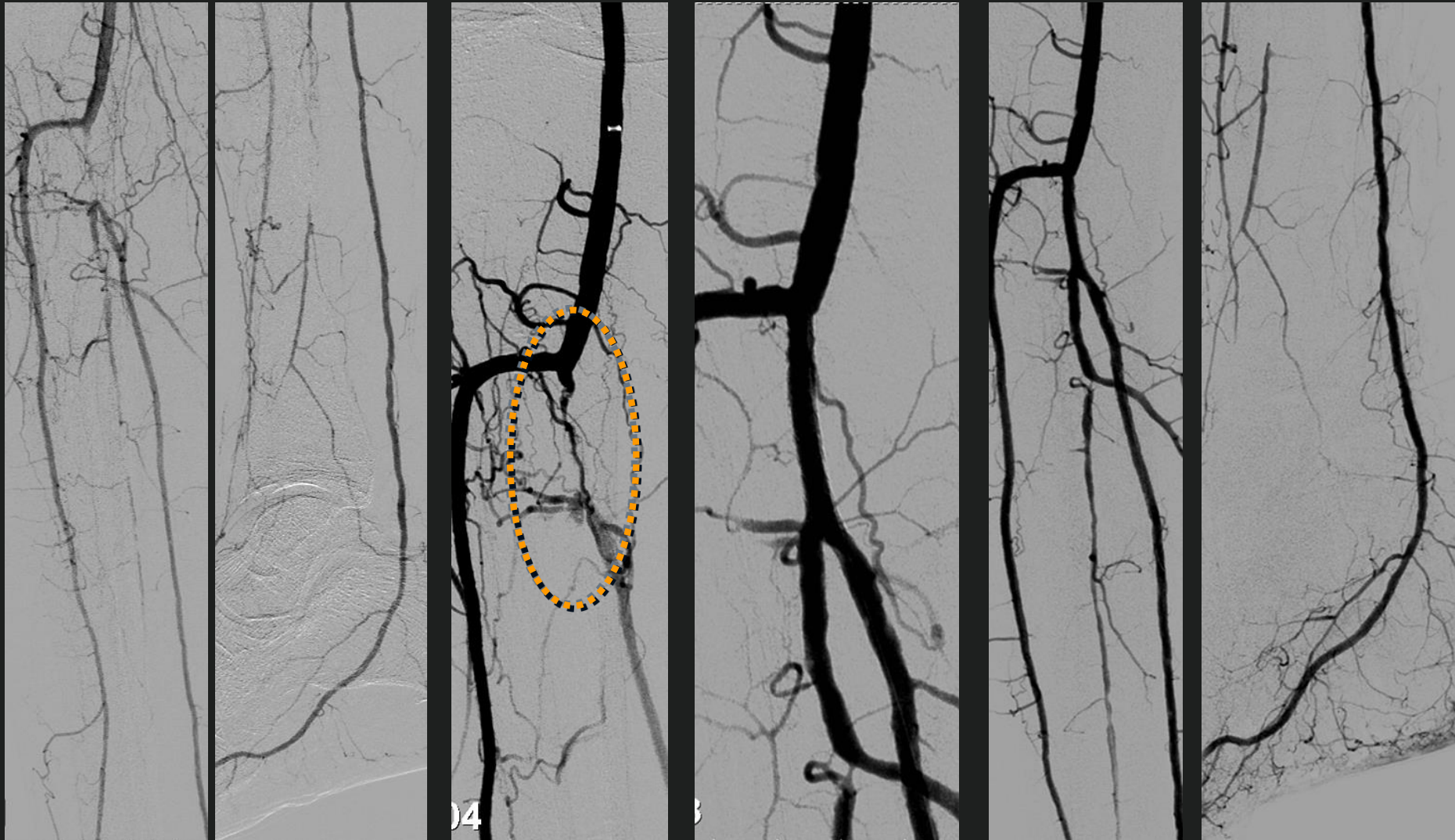




Scaffolding in the BTK arteries

Martin Werner
Vienna, Austria

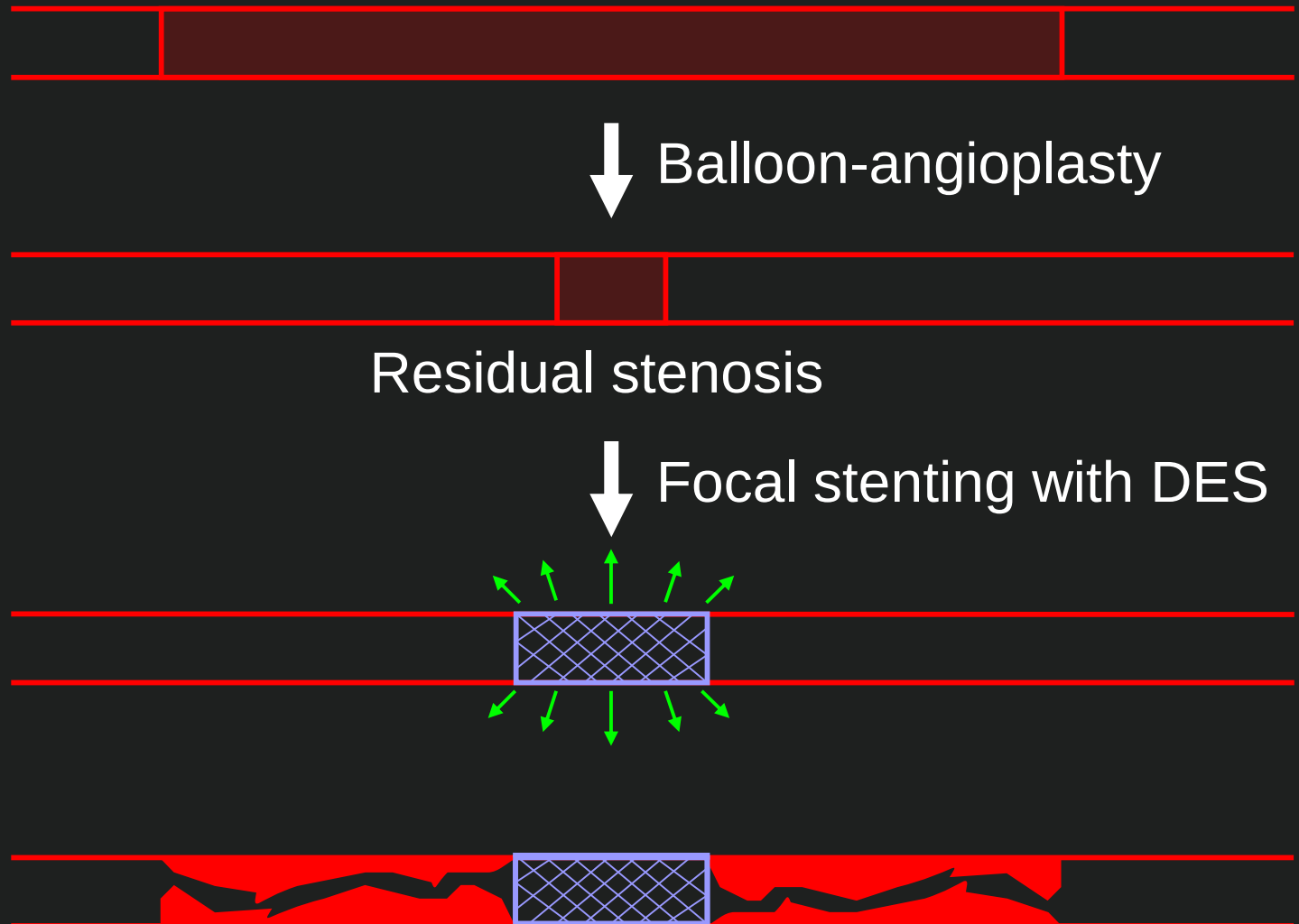
Scaffolding Below-The-Knee



52 years, DM, Rutherford 5

Cypher 3,5/33mm

Scaffolding BTK - Problem of Long Lesions



Randomized Trials DES BTK

- **YUKON:**

- Yukon BMS vs. **Sirolimus** coated stent (no polymer)

- **DESTINY:**

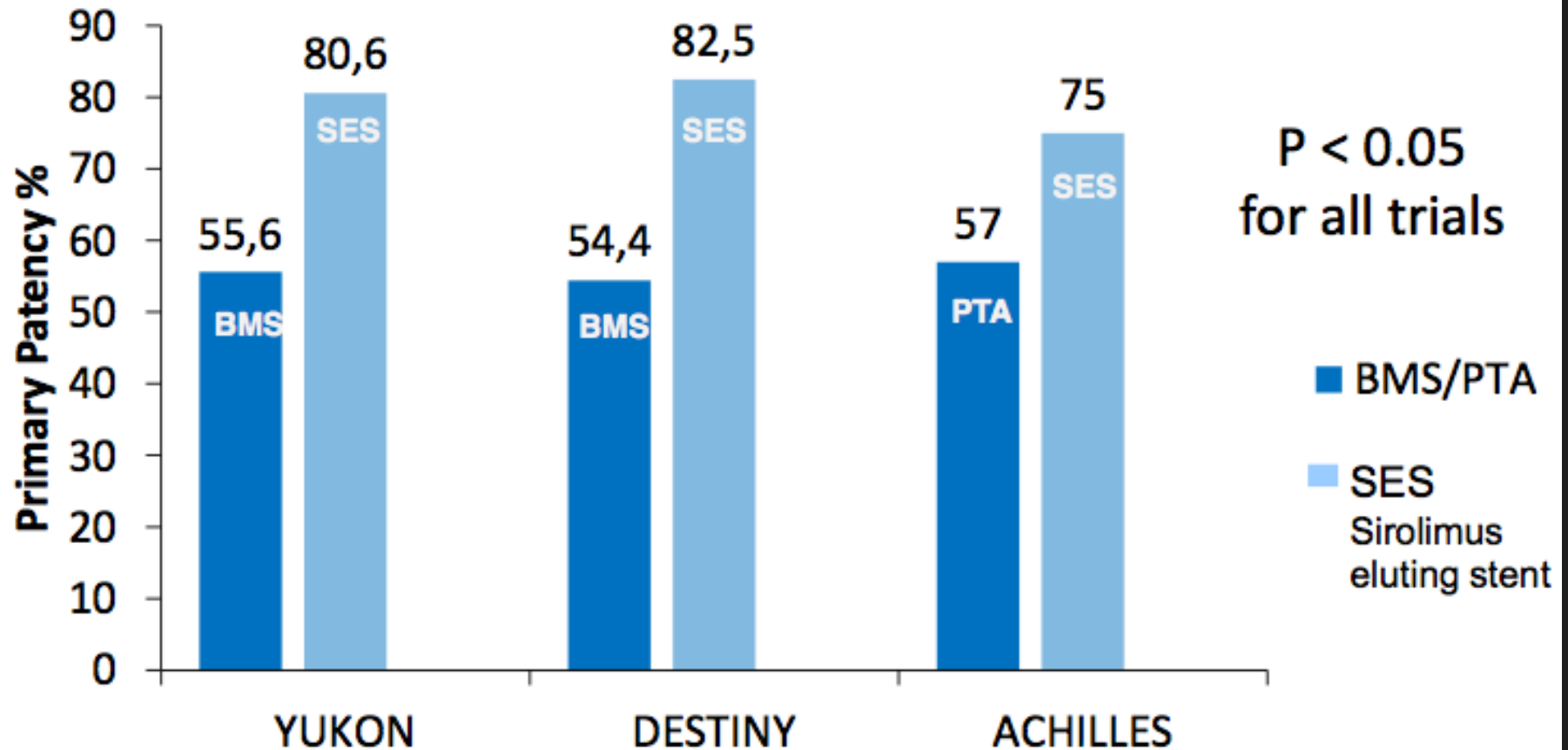
- BMS (Multilink Vision) vs. Xience V (**Everolimus**)

- **ACHILLES:**

- Balloon vs. Cypher Select (**Sirolimus**)

Randomized Trials DES BTK

1 year patency rates

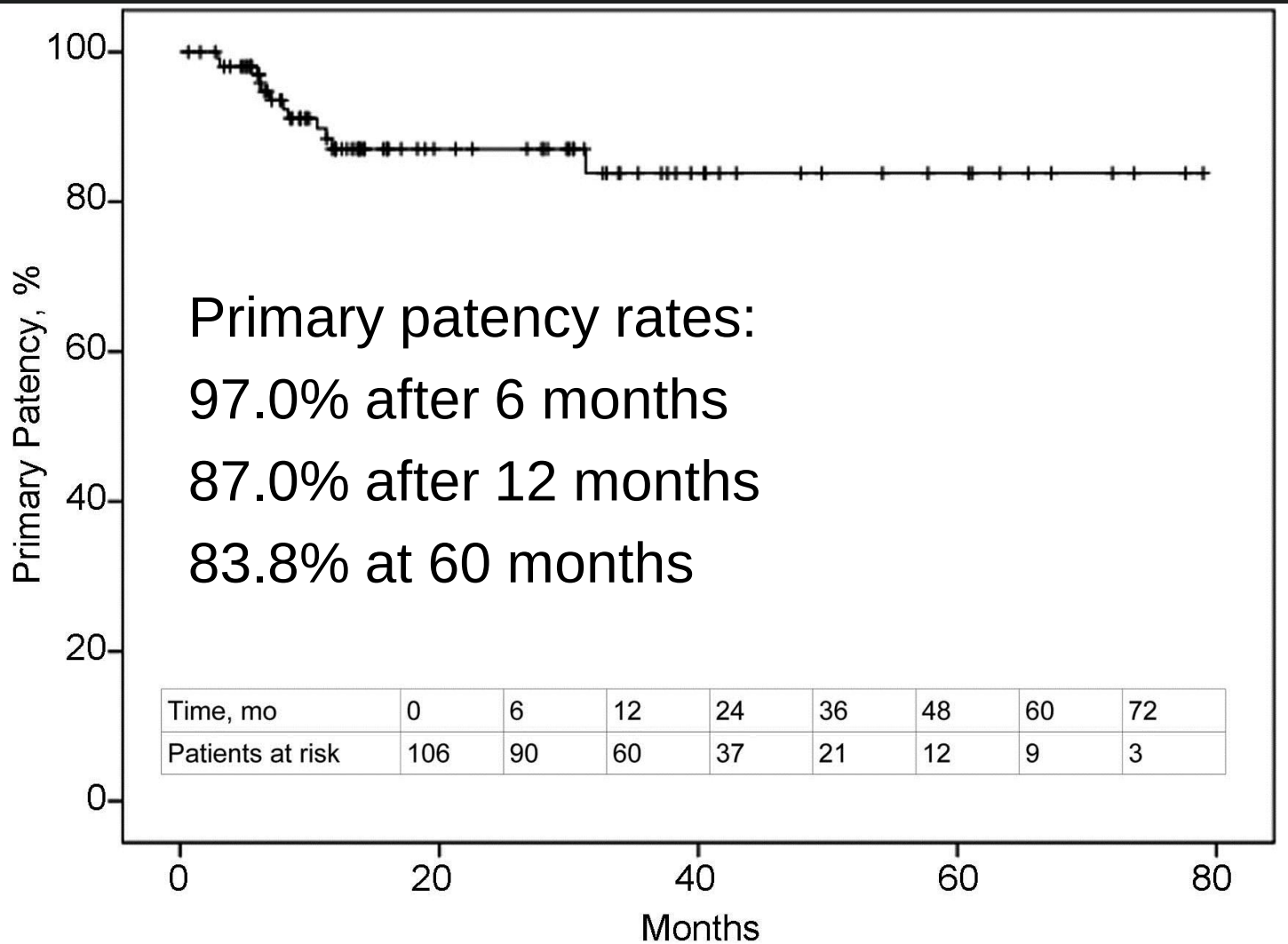


Rastan A. et al (2011). *European Heart Journal*, 32, 2274-2281

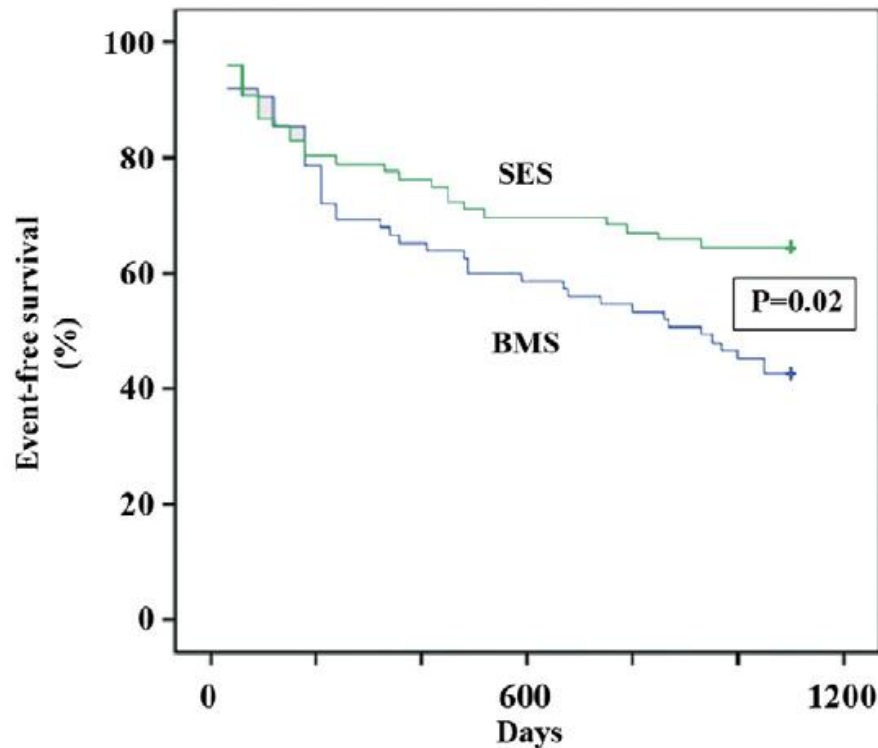
Bosiers M. et al (2012). *Journal of Vascular Surgery*, 55, 390-398

Scheinert D. et al (2012). *Journal of the American College of Cardiology*, 60, 2290-2295

Long-Term Patency Cypher BTK



Yukon Long-Term Results (1016 days)



No. at risk

Sirolimus Stent	82	62	59
Bare-metal Stent	79	63	57

CLI-patients	DES (n=38)	BMS (n=31)	p
Major amputation	1	4	0.04

IC-patients	DES (n=38)	BMS (n=44)	p
TVR	3	11	0.04

Freedom from:
amputation, TVR, MI, death

Rastan et al. *JACC* 2012

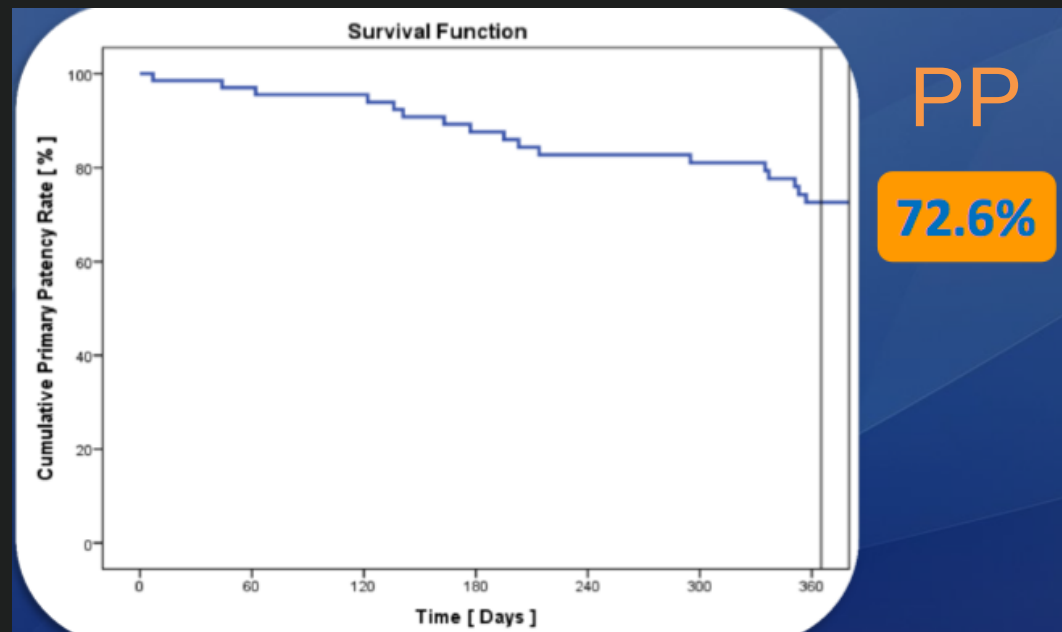
DES below the knee: New Devices

STENTYS Stent System (Stentys)

→ Self-expanding **Paclitaxel** eluting Stent



PES BTK-70 study (70 patients, focal lesions)

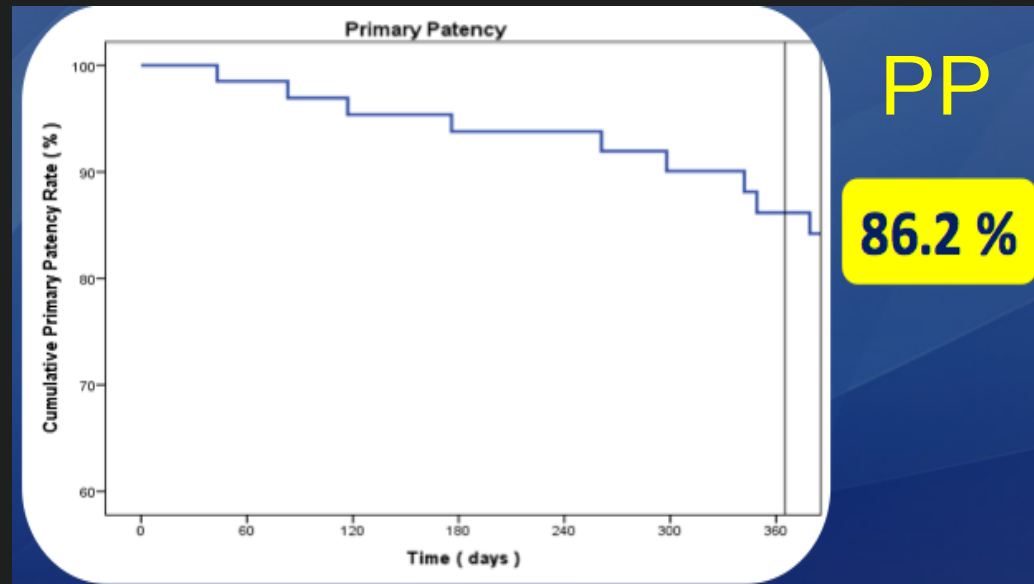
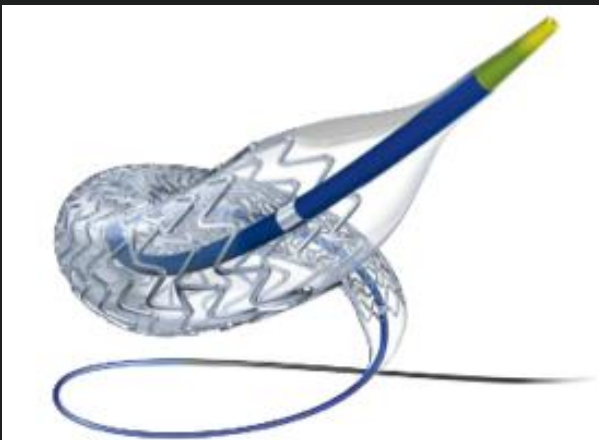


DES below the knee: New Devices

PROMUS Stent (Boston Scientific)

→ Balloon-expanding **Everolimus** Eluting Stent

PREVENT study (70 patients, focal lesions)

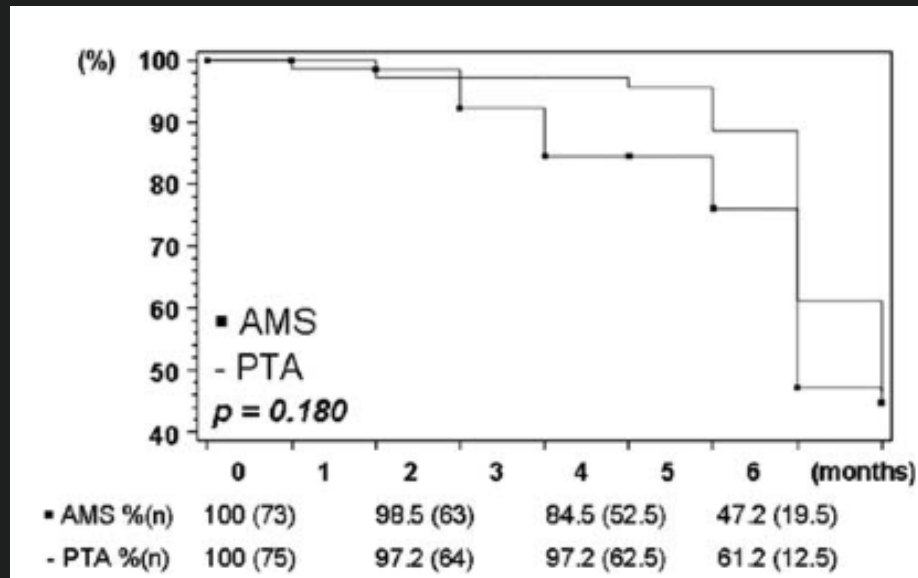
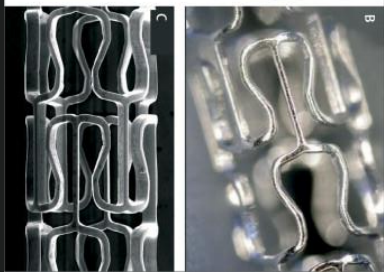
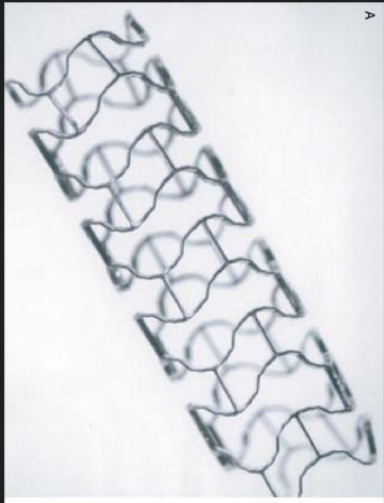


The role of bioabsorbable scaffolds:

AMS Stent (Biotronik)

→ Balloon-expandable magnesium alloy absorbable stent

AMS Insight study (117 patients, focal lesions)

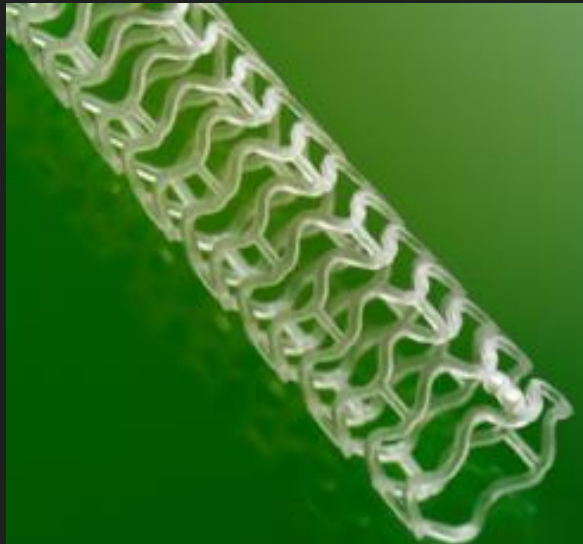


The role of bioabsorbable scaffolds:

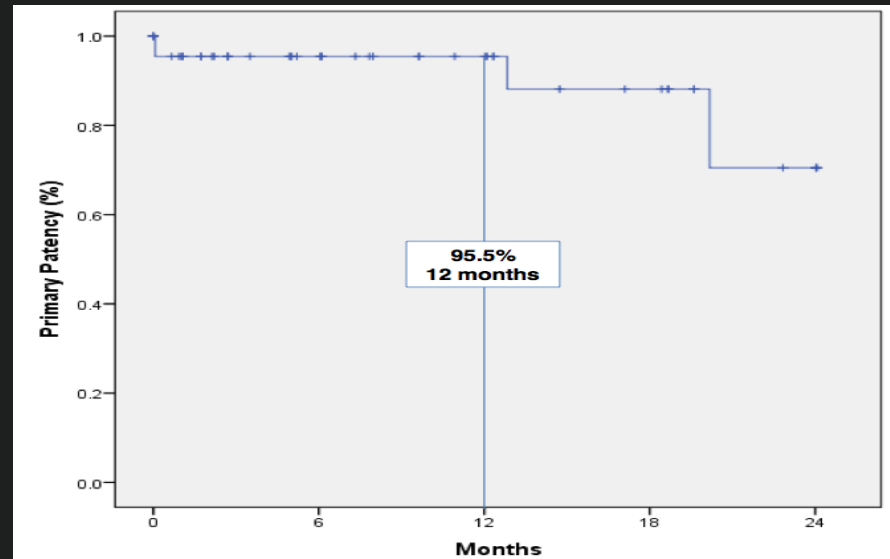
ABSORB Bioabsorbable scaffold

→ Balloon-expandable **Everolimus** eluting absorbable stent
(Poly-L-Lactid Acid)

ABSORB BTK study (32 patients, focal lesions)



PP



Conclusion

DES are the first choice for focal BTK-lesions

No scaffolding for long lesions

(except for focal bail-out stenting)

Bioabsorbable technology still in early
development, no routine use



Scaffolding in the BTK arteries

Martin Werner
Vienna, Austria