

video on slides.3

EVEROLIMUS ELUTING CORONARY STENTS FOR LONG INFRA-POPLITEAL LESIONS FOR CRITICAL LIMB ISCHEMIA: LONG DES-BTK



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Disclosures:

In the past 12 months, my spouse or myself have engaged in financial relationships as follows:

- Consultant:
 - Boston Scientific, Medtronic
- Advisory Panel:
 - The Medicines Company
- Speakers Bureau:
 - Medtronic, Abbott, Endologix
- Research Support
 - Philips Healthcare, Venite, Bard, BTG, Boston Scientific, Penumbra, Angiodynamics
- Clinical Events Committee
 - Shockwave (Disrupt PAD), Intact Vascular (TOBA-2)

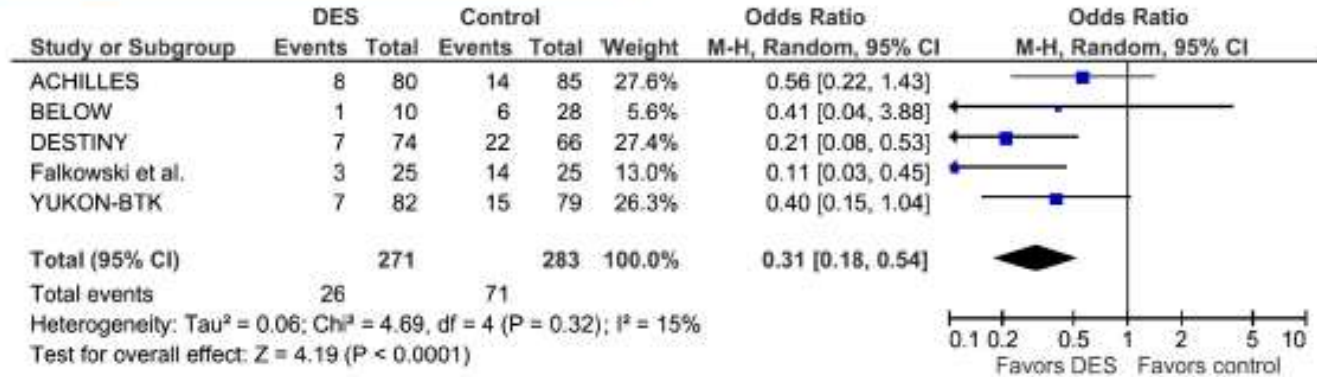
Drug-Eluting Stents for Revascularization of Infrapopliteal Arteries

Updated Meta-Analysis of Randomized Trials

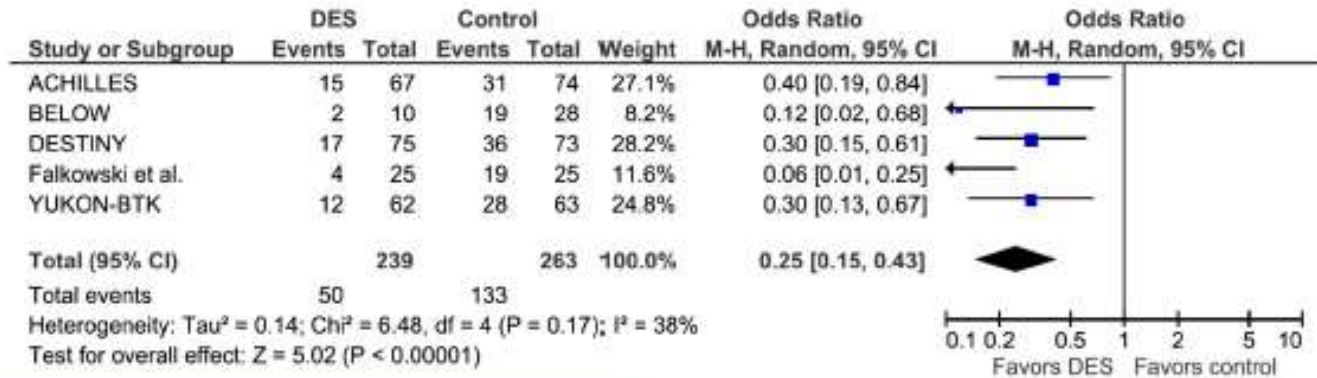
Massimiliano Fusaro, MD,* Salvatore Cassese, MD,* Gjin Ndrepepa, MD,*
Gunnar Tepe, MD,† Lamin King, MD,* Ilka Ott, MD,* Mateja Nerad, MD,‡
Heribert Schunkert, MD,*§ Adnan Kastrati, MD*§

Munich and Tübingen, Germany; and Graz, Austria

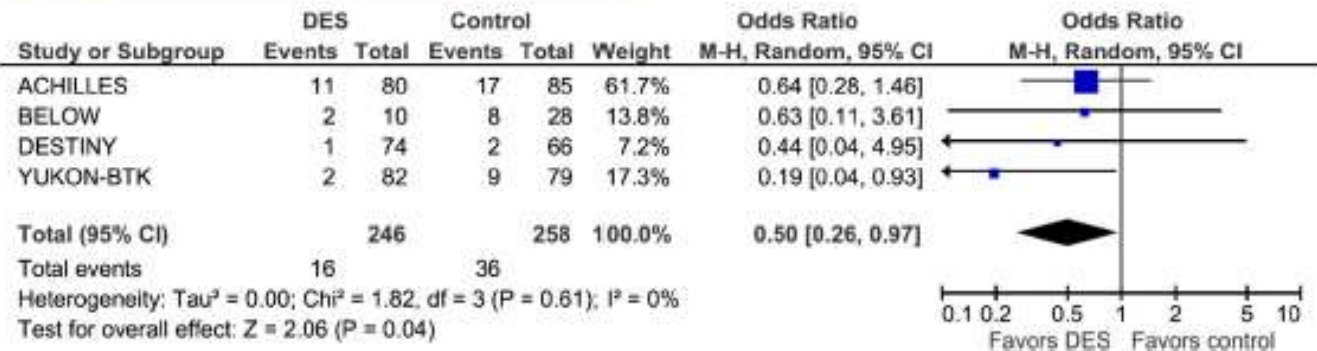
A Target lesion revascularization



B Restenosis



C Amputation



ORIGINAL ARTICLE
VASCULAR SURGERY

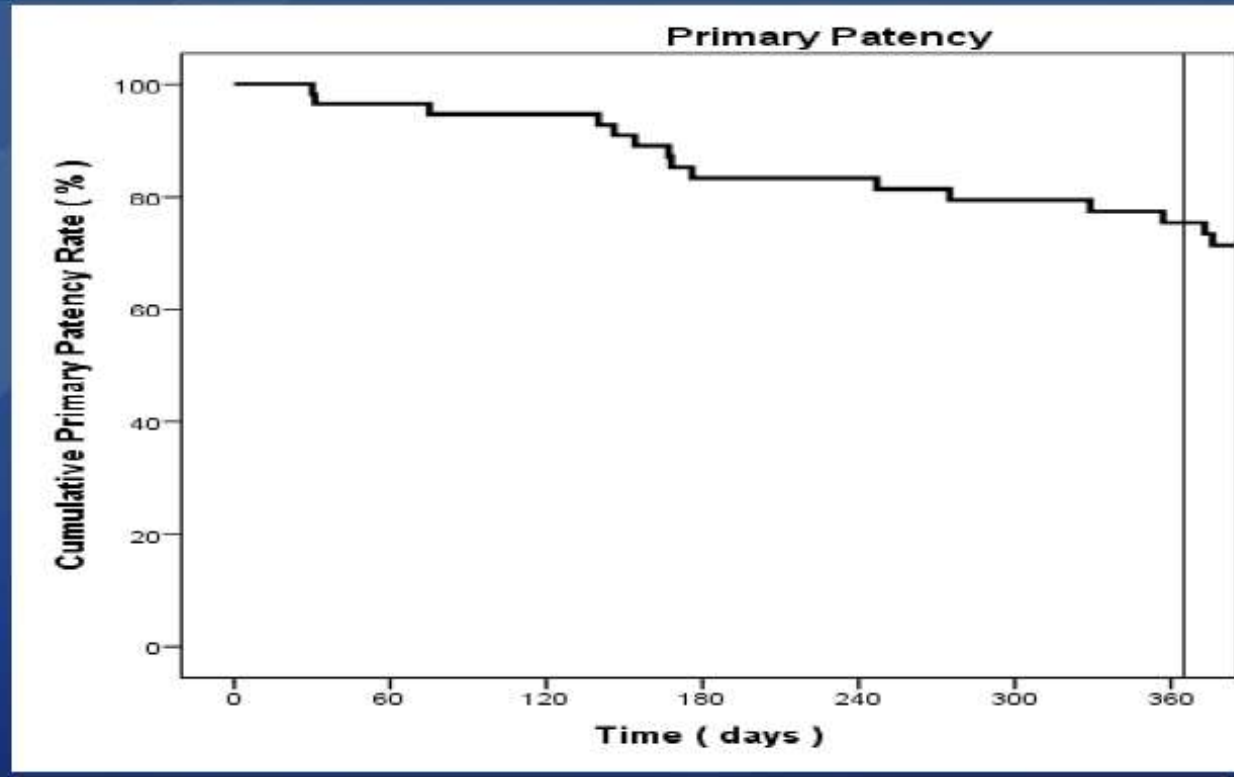
Outcome of a drug-eluting stent
in longer below-the-knee lesions
in patients with critical limb ischemia

Michel J. BOSIERS^{1,2*}, Koen DELOOSE⁴, Patrick PEETERS⁴,
Giovanni TORSELLO^{1,2}, Thomas ZELLER⁵, Dierk SCHEINERT⁶, Andrej SCHMIDT⁷,
Lieven MAENE⁷, Koen KEIRSE⁸, Ramon VARCOE⁹, Marc BOSIERS³

DESTINY 2 study: 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%)

DESTINY 2 study: 12 Month Primary Patency



75.4 %

Long Everolimus Eluting Stents BTK LEES-BTK Registry

- Over 400 pts over a 10 yr period received EES-BTK
- Real World EES-BTK registry for Critical Limb Ischemia
- Long lesion subset presented here
- Long lesions were defined as two or more overlapping stents in a single infrapopliteal segment
- All lesions were treated with EES
 - AFTER FAILED ANGIOPLASTY (solely bailout cohort)
- 72 limbs in 69 patients had 231 stents placed
(3.2 stents per limb; range 2-7)

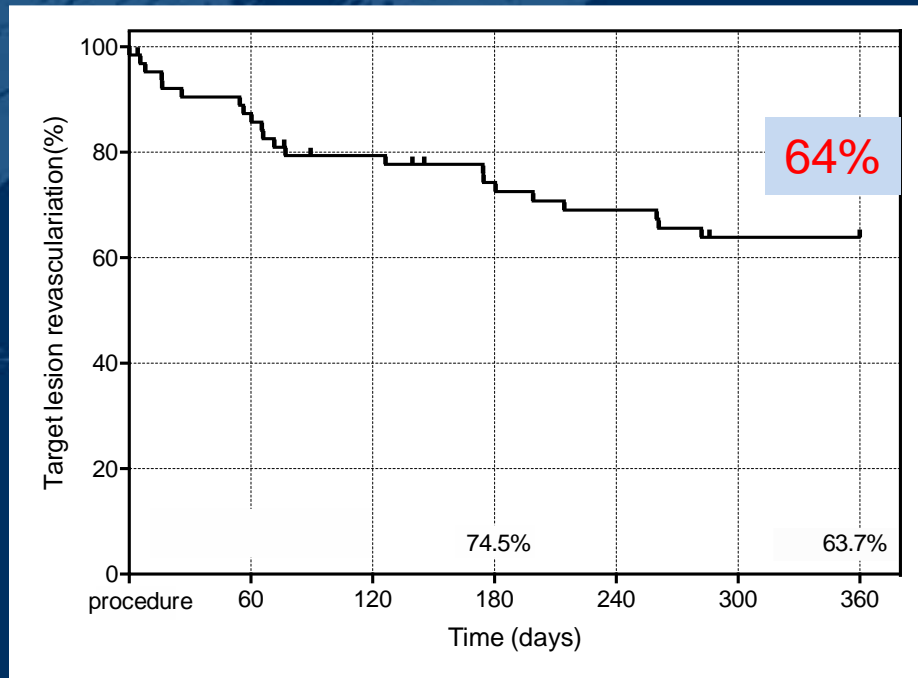
Patient Demographics:

Patients (n)	69
Male	41/69 (60)
Age, years	73.9 ± 11.6
Comorbid Conditions	
Coronary Artery Disease	51/69 (74)
Diabetes	42/69 (61)
Chronic Kidney Disease	26/69 (38)
Hypertension	62/79 (91)
Limbs Treated	72
Rutherford Grade	
Class 4	16/72 (22)
Class 5	24/72 (34)
Class 6	32/72 (44)
Simultaneous Fem-Pop intervention	32/72 (44)

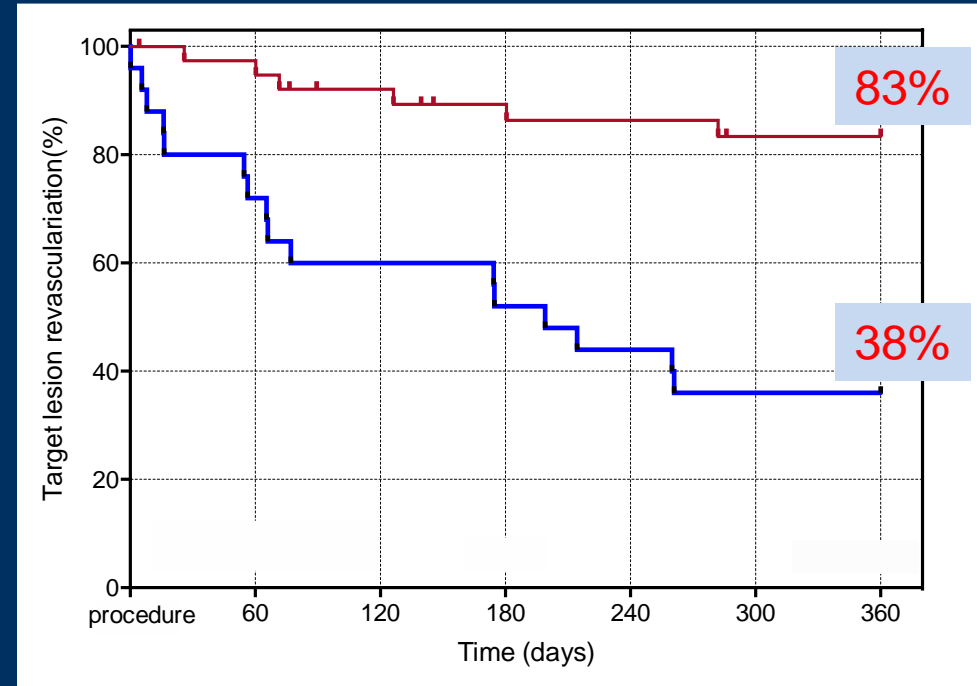
Lesion and Intervention Characteristics

Treated Vessels	73
Chronic Total Occlusion	43/73 (56)
Reference Vessel Diameter (mm)	3.5 ± 0.4
Baseline Lesion Length (mm)	103.9 ± 53.5
Number of Overlapping Stents	3.2
Target Vessels	
Anterior Tibial (AT)	22/73 (37)
Posterior Tibial (PT)	11/73 (15)
Peroneal Artery (PA)	14/73 (20)
Tibioperoneal trunk + PT	9/73 (13)
Tibioperoneal trunk + PA	11/73 (15)
Immediate Technical Success	72/73 (98)

Freedom from Target Lesion Revascularization

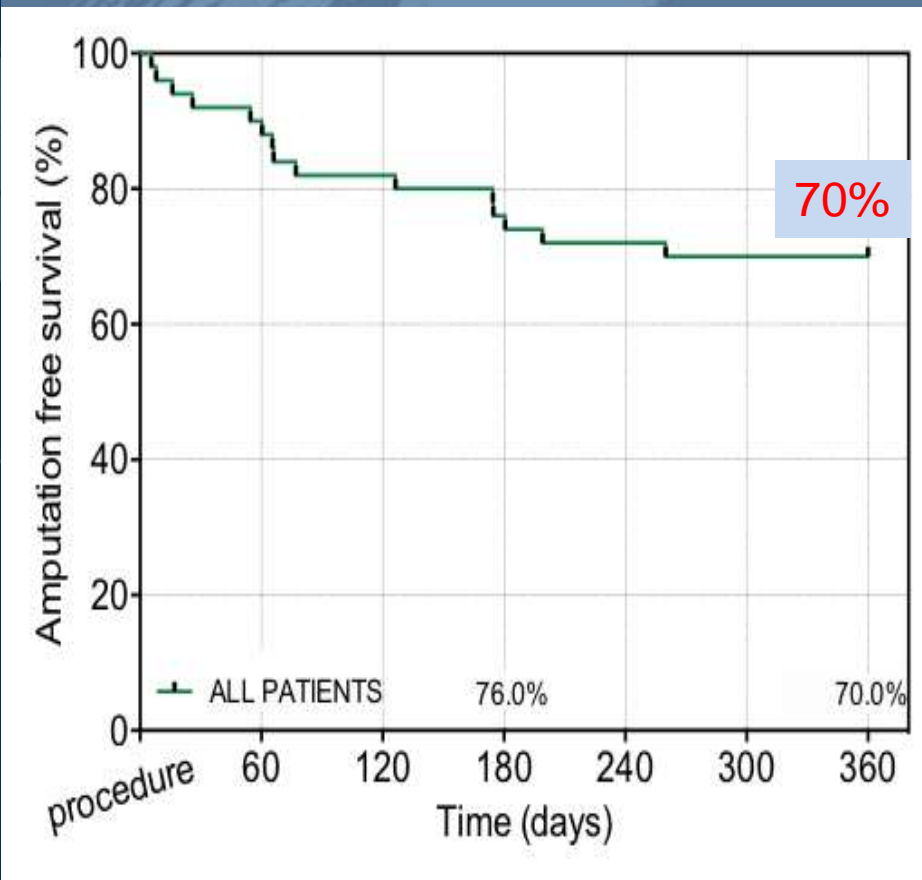


ENTIRE COHORT

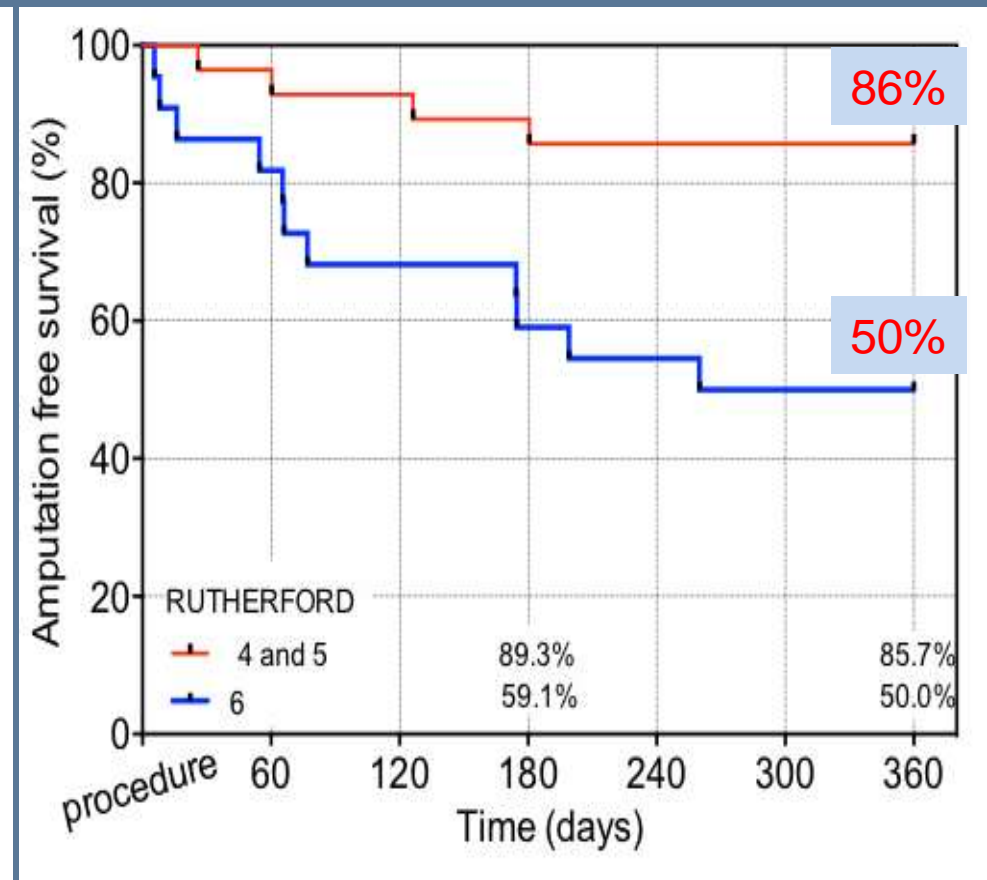


RUTHERFORD 4/5 VS 6

Amputation Free Survival



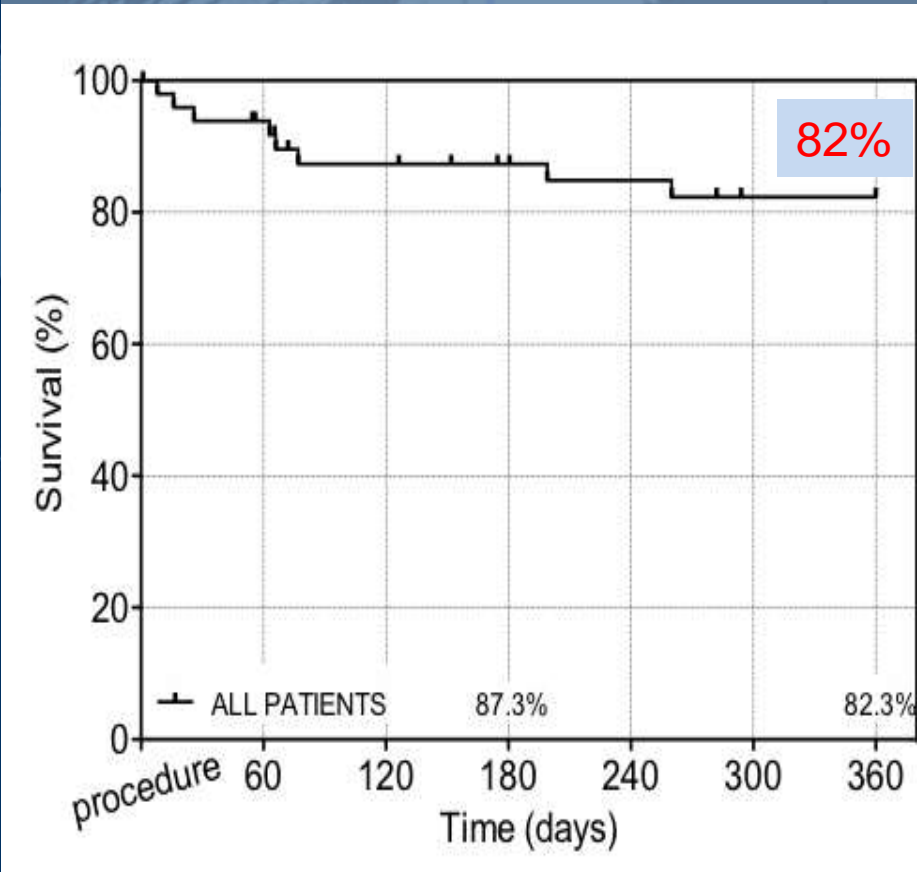
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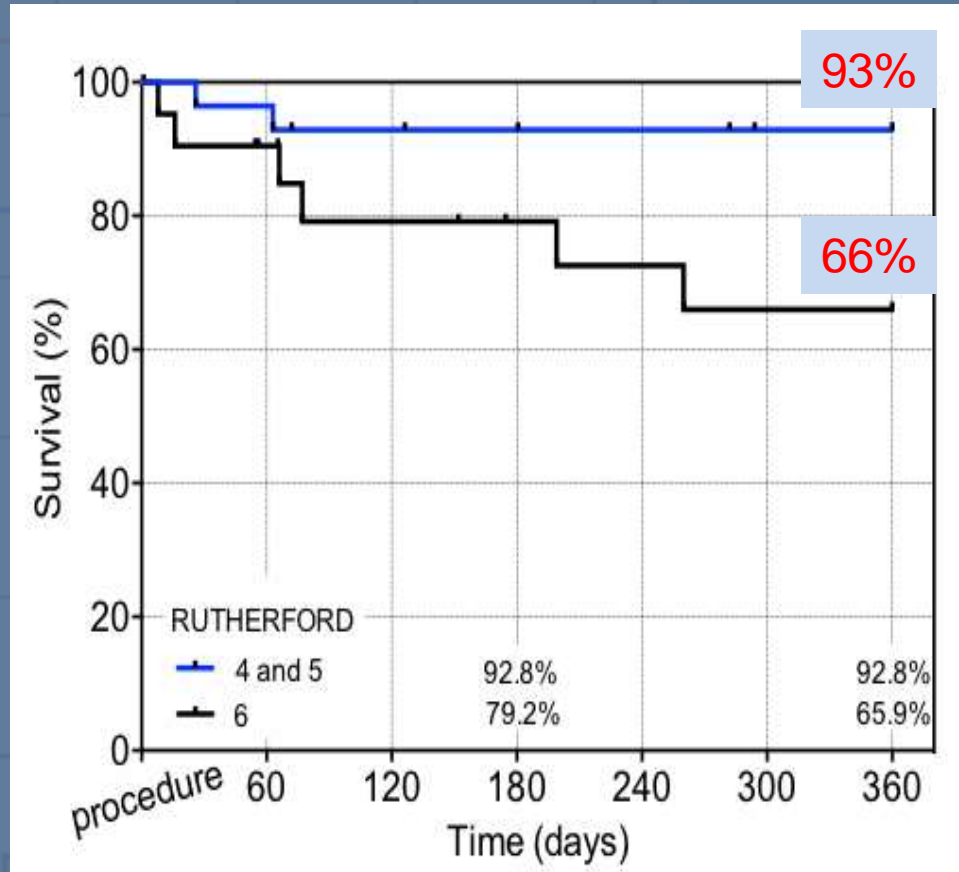
RUTHERFORD 4/5 VS 6

P = 0.0065

Overall Survival at 1 Year



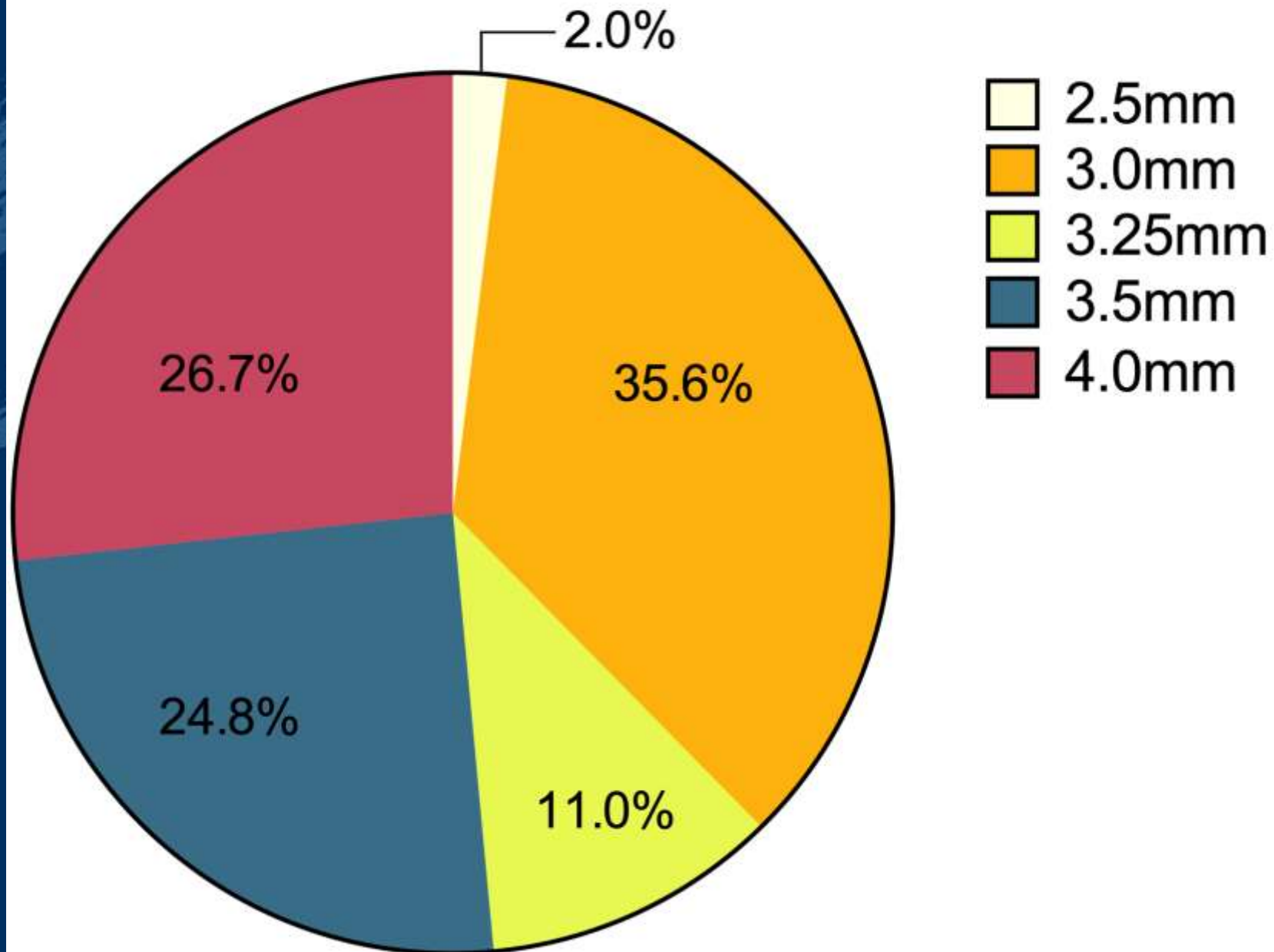
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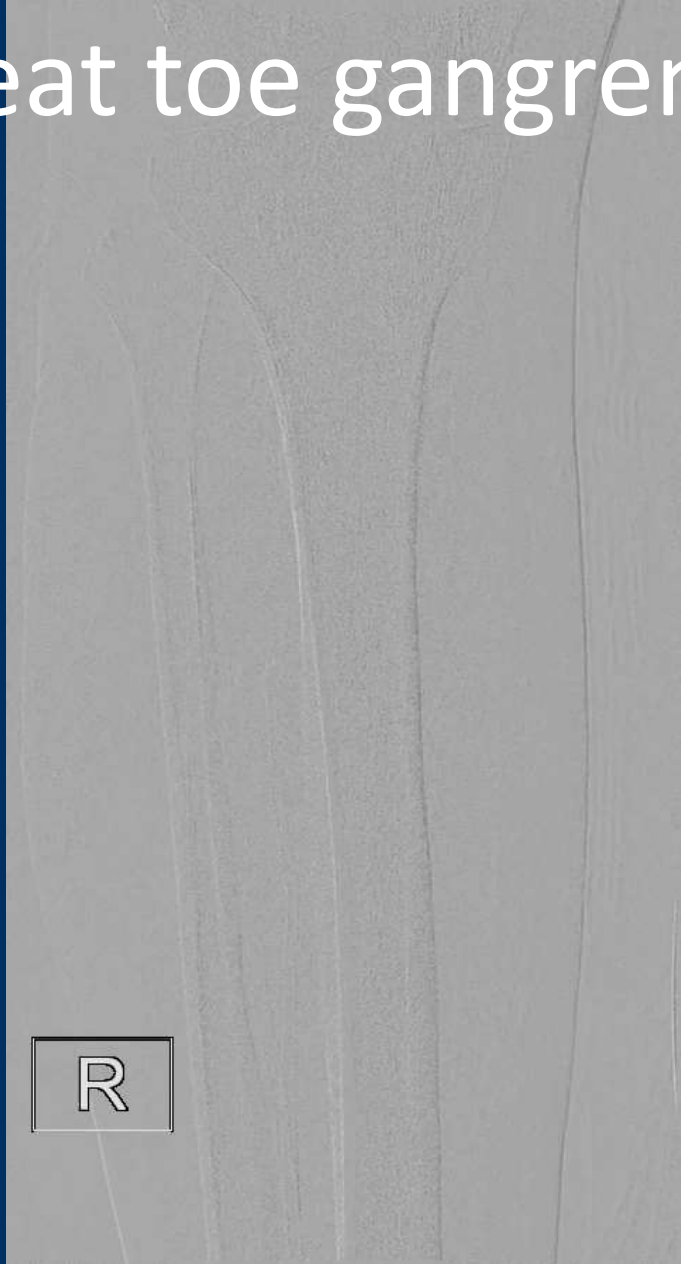
RUTHERFORD 4/5 VS 6

P = 0.01

Diameter of Xience stents placed BTK



78 male with great toe gangrene



Following revasc with 4 Xience stents in Ant Tibial



18 month Follow Up



Angiographic Outcomes at 12 months

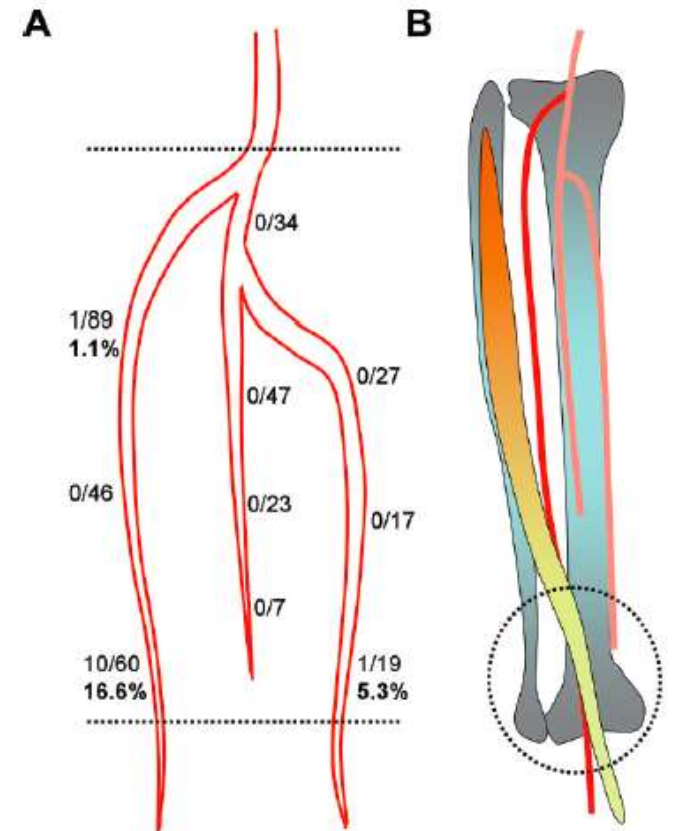
- Two stent fractures were seen with stents placed at the ankle
- Eight CD-TLR in total cohort
 - (Only four for Rutherford 4/5)
- Nine CD- Target Limb Revasc in Total Cohort
 - (Only four in Rutherford 4/5)
- 5 of 9 Target Limb Revascularizations were Proximal Edge Lesions in Mid to distal vessel stents
- No Target Vessel Revascularizations were seen when ostial stenting was used

◆ CLINICAL INVESTIGATION ◆

Incidence, Anatomical Location, and Clinical Significance of Compressions and Fractures in Infrapopliteal Balloon-Expandable Metal Stents

Dimitris Karnabatidis, MD, PhD¹; Konstantinos Katsanos, MD¹; Stavros Spiliopoulos, MD¹; Athanasios Diamantopoulos, MD¹; George C. Kagadis, PhD²; and Dimitris Siablis, MD, PhD¹

¹Department of Radiology, Patras University Hospital, Rion, Greece. ²Department of Medical Physics, School of Medicine, Rion, Greece.



In summary

- Long Everolimus Eluting Stents in Infrapopliteal vessels are feasible following failed angioplasty
- In a real world cohort with mean lesion length of over 10cm, excellent **freedom from CD-TLR was maintained for Rutherford 4/5 at 12 months (83%)**
- Proximal edge lesions appear to be a frequent failure mechanism
 - (proximal/ostial disease maybe best suited for this technology)*
- Rutherford 4/5 patients maintain the greatest clinical benefit at present with this technology

In my practice

- Long lesion POBA based on the evidence from the randomized trials
- Balloon expandable drug eluting stents for short or proximal long lesions as bailout in the setting of recoil or dissection
- Reserve atherectomy for dense/severe calcification
- Eagerly awaiting dedicated labeled implants for BTK in the US.

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