



Below Knee Stents and Scaffolds: Current Status



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Disclosures:

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

- Advisory Board: Boston Scientific, Medtronic
- Consultant: Penumbra, Imperative Vascular, Abbott Vascular, Aidoc, Sonovascular, Cordis, Johnson & Johnson
- Clinical Events Committee/DSMB: INTACT Vascular, Shockwave, Tiresome, Thrombolax
- Speakers Bureau: Abbott Vascular
- Equity Shareholder: Imperative Vascular, Innova Vascular, Thrombolax, Summa Vascular, Inspire MD, Votis
- Research Support
 - Philips Healthcare, Spectranetics, Terumo, Boston Scientific, INARI, Penumbra, Ethicon, Ethicon, Black Swan, Instylla, Gore, Reva Medical, Imperative vascular, Angiodynamics
- Immediate Past President-PERT Consortium
- Executive Council Society of Interventional Radiology
- Board Member-CLI Global Society

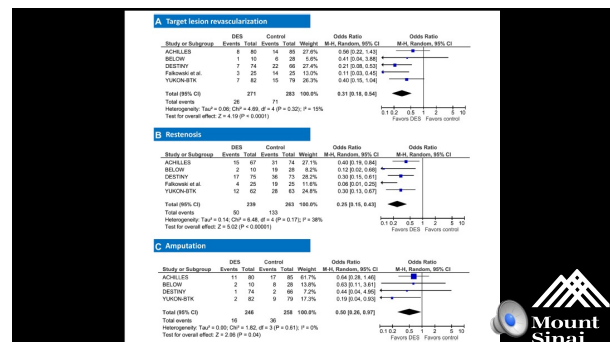


Drug-Eluting Stents for Revascularization of Infrapopliteal Arteries

Updated Meta-Analysis of Randomized Trials

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

Munich and Tübingen, Germany and Graz, Austria

Stentless-eluting stents vs. bare-metal stents for treatment of focal lesions in infrapopliteal arteries: a double-blind, multi-centre, randomized clinical trial

Perforated Transcatheter Angioplasty and Drug-Eluting Stents for Infrapopliteal Lesions in Critical Limb Ischemia (PALM) Trial

Randomized comparison of everolimus-eluting versus bare-metal stents in patients with critical limb ischemia and infrapopliteal arterial occlusive disease

A Prospective Randomized Multicenter Comparison of Balloon Angioplasty and Infrapopliteal Stenting With the Sirolimus-Eluting Stent in Patients With Ischemic Peripheral Arterial Disease

Primary results of the SAVAR randomized trial of a paclitaxel-eluting stent versus percutaneous transluminal angioplasty for infrapopliteal arteries


Drug-Eluting Resorbable Scaffold versus Angioplasty for Infrapopliteal Artery Disease

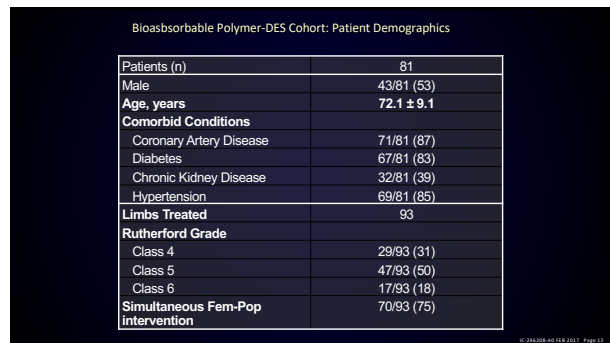
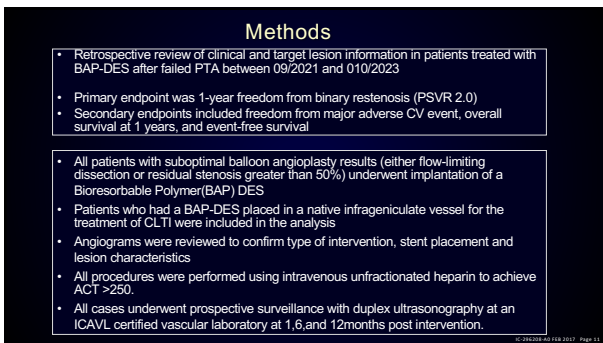
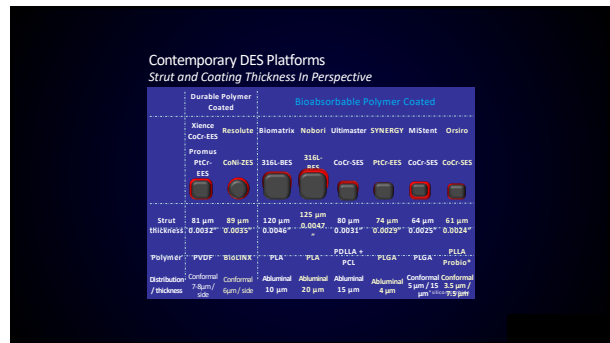
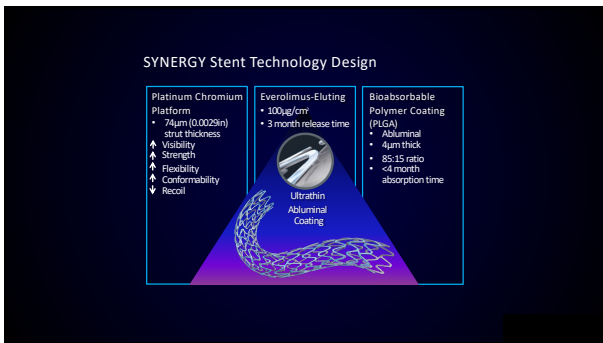
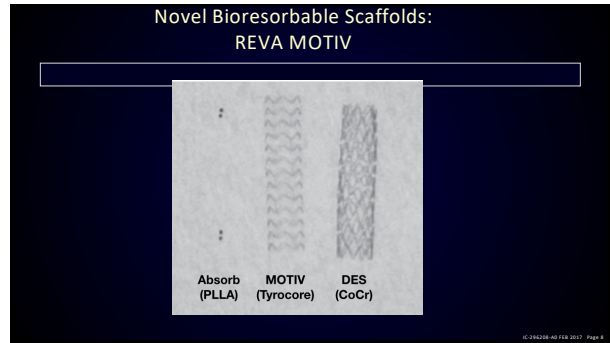
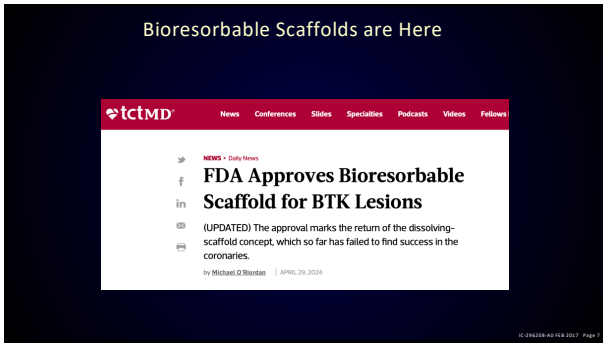
Outcome of a drug-eluting stent in longer below-knee lesions in patients with critical limb ischemia



Summary of DES/BVS-BTK trials 12 month Patency

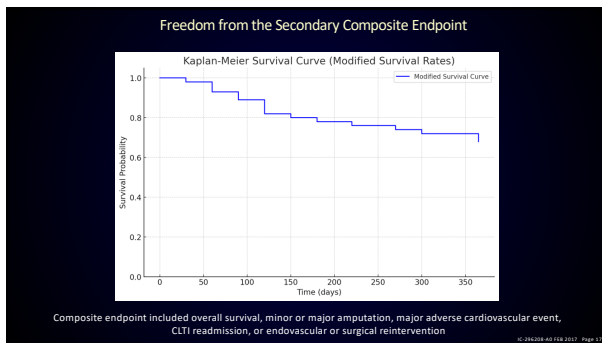
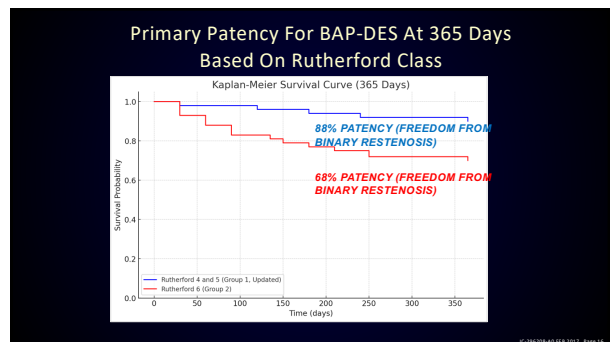
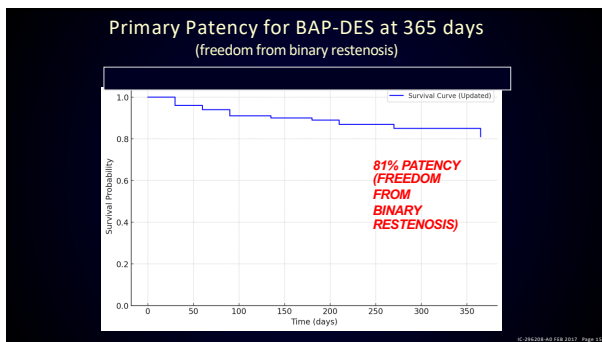
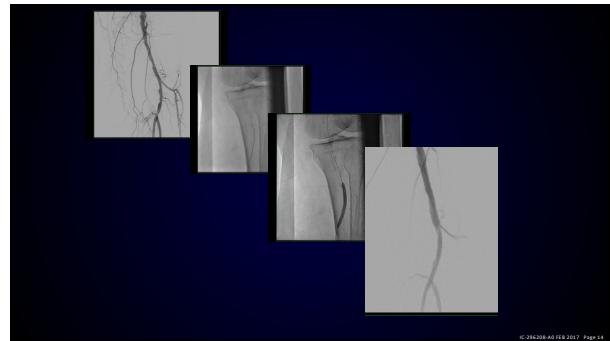
TRIAL	DES	PTA/BMS	LESION LENGTH
ACHILLES	80.60%	58.10%	27mm
YUKON	80.60%	55.60%	31mm
DESTINY	85.20%	54.40%	19mm
PADI	65.10%	42%	23mm
DESTINY 2	75.40%	N/A	45mm
SAVAR	68%	76%	68mm
LIFE-BTK	76%	50%	44mm





Bioabsorbable Polymer DES Cohort:
Lesion and Intervention Characteristics

Treated Vessels	93
Chronic Total Occlusion	46/93 (49)
Reference Vessel Diameter (mm)	3.6 ± 0.4; 3.5
Baseline Lesion Length (mm)	73 ± 41.2
Number of Overlapping Stents	1.9
Target Vessels	
Anterior Tibial (AT)	33/93 (35)
Posterior Tibial (PT)	38/93 (40)
Peroneal Artery (PA)	8/93 (9)
Tibioperoneal trunk + PT	12/93 (13)
Tibioperoneal trunk + PA	6/93 (6)
Immediate Technical Success	93/93 (100)



- In summary**
- BAP-DES appear to be safe and effective in the infrapopliteal circulation for CLTI pts after failed angioplasty
 - There is an opportunity to re-invest and re-evaluate the ideal scaffold for BTK applications
 - A great number of research opportunities available
 - At our Practice, Long lesion POBA based on the evidence from the randomized trials
 - BAP-drug eluting stents or BVS for short lesions or bailout in the setting of recoil or dissection for long lesions
 - Reserve atherectomy for dense/severe calcification
 - Opportunities to re-examine the role of permanent DES for BTK with prospective datasets??
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