

Inverse probability weighted comparison of interwoven nitinol with drug-eluting stents for femoropopliteal artery disease (6 min)

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Disclosure

Speaker name:

.....Baumgartner.....

I have the following potential conflicts of interest to report:

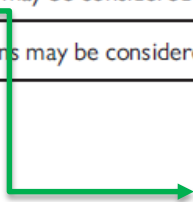
- Institutional educational grants: Abbott, Cook, Boston Scientific
- Employment in industry
- Stockholder of a healthcare company
- Owner of a healthcare company
- Other(s)

- I do not have any potential conflict of interest

ESC 2017

Recommendations on revascularization of femoro-popliteal occlusive lesions^c

Recommendations	Class ^a	Level ^b
An endovascular-first strategy is recommended in short (i.e. <25 cm) lesions. ^{302,303}	I	C
Primary stent implantation should be considered in short (i.e. <25 cm) lesions. ^{304,305}	IIa	A
Drug-eluting balloons may be considered in short (i.e. <25 cm) lesions. ^{77,306–310}	IIb	A
Drug-eluting stents may be considered for short (i.e. <25 cm) lesions. ^{302,303,311}	IIb	B
Drug-eluting balloons may be considered for the treatment of in-stent restenosis. ^{312,313}	IIb	B



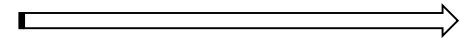
Paclitaxel-Eluting Stents Show Superiority to Balloon Angioplasty and Bare Metal Stents in Femoropopliteal Disease
 Twelve-Month Zilver PTX Randomized Study Results

A polymer-coated, paclitaxel-eluting stent (Eluvia) versus a polymer-free, paclitaxel-coated stent (Zilver PTX) for endovascular femoropopliteal intervention (IMPERIAL): a randomised, non-inferiority trial

Comparative Outcomes of Supera Interwoven Nitinol vs Bare Nitinol Stents for the Treatment of Femoropopliteal Disease: Insights From the XLPAD Registry.

Comparison between Interwoven Nitinol and Drug eluting Stents for Endovascular Treatment of Femoropopliteal Artery Disease

Eur J Vasc Endovasc Surg; October 2019



Interwoven Nitinol Stents versus Drug Eluting Stents in the Femoro-Popliteal Segment: A Propensity Matched Analysis

Eur J Vasc Endovasc Surg; September 2019

Study Overview I

Study Design

Retrospective 2012 - 2016

Inclusion

- ✓ Symptomatic PAD
- ✓ Rutherford Class 2 – 6

Vessel region

- ✓ Femoropopliteal artery
- ✓ Primary intervention

Study Overview II

Vessel preparation

POBA

✓ PTX-eluting nitinol stent (Zilver PTX®)

Treatment

2 Groups

✓ Interwoven Nitinol Stent (Supera®)

Primary endpoint

CD-TLR @ 12 months

Baseline characteristics - full cohort (n = 234)

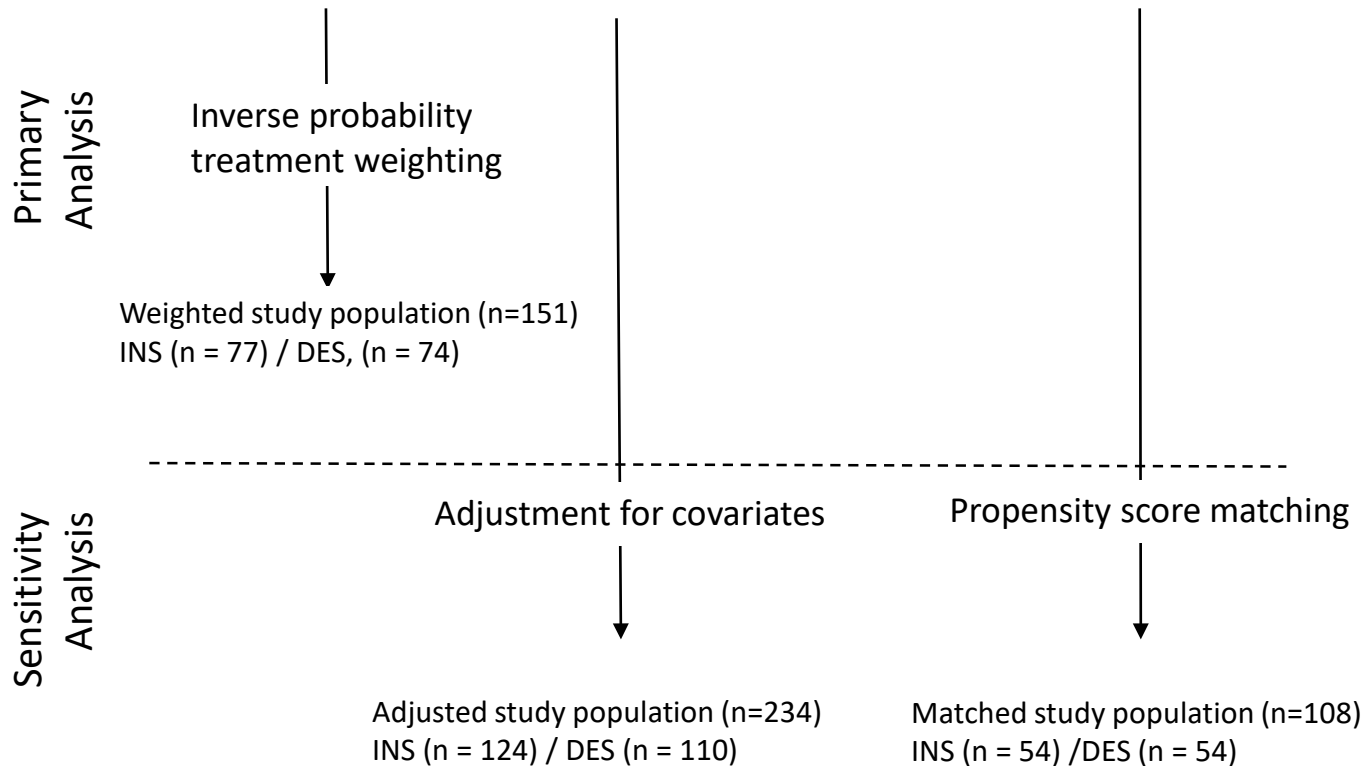
INS (N=124)

DES (N=110)

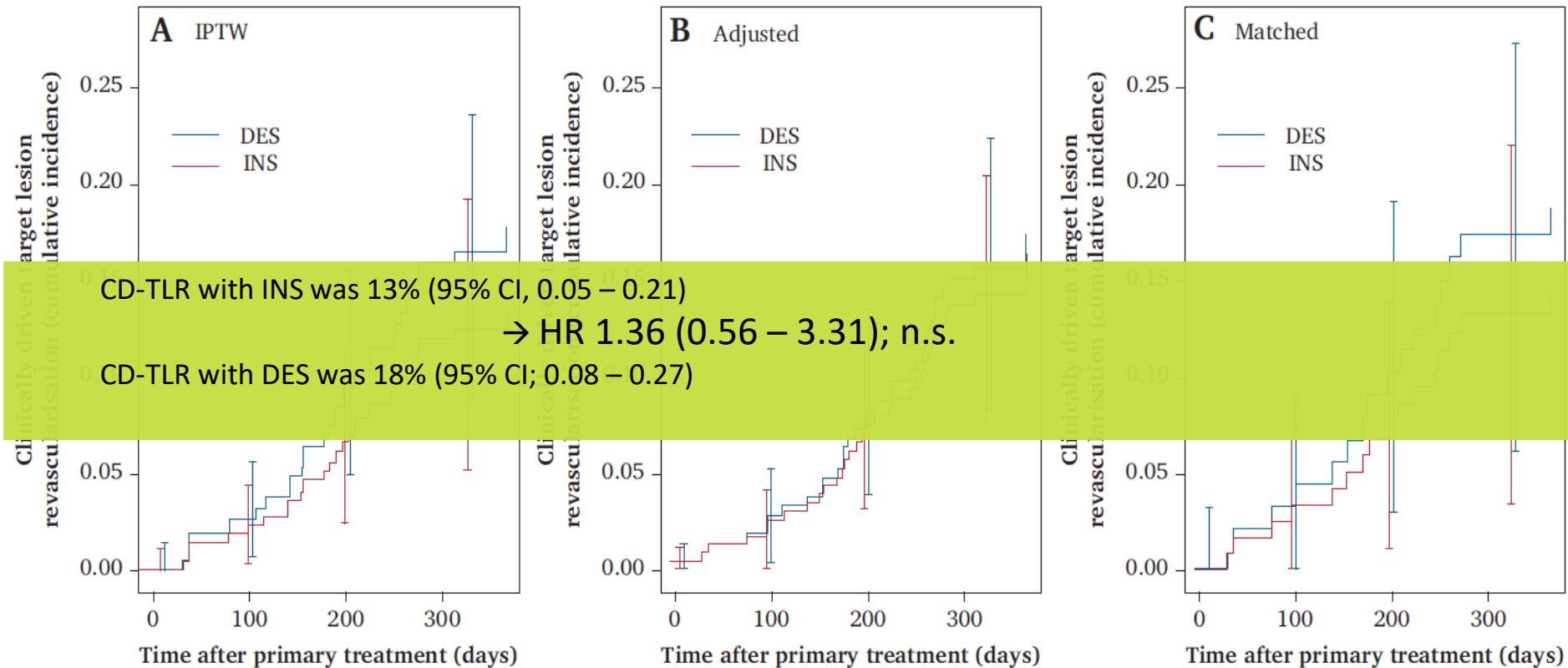
p-value

Severe Calcification	53.2%	25.5%	< 0.001
Popliteal Involvement	70.2%	20.0%	< 0.001

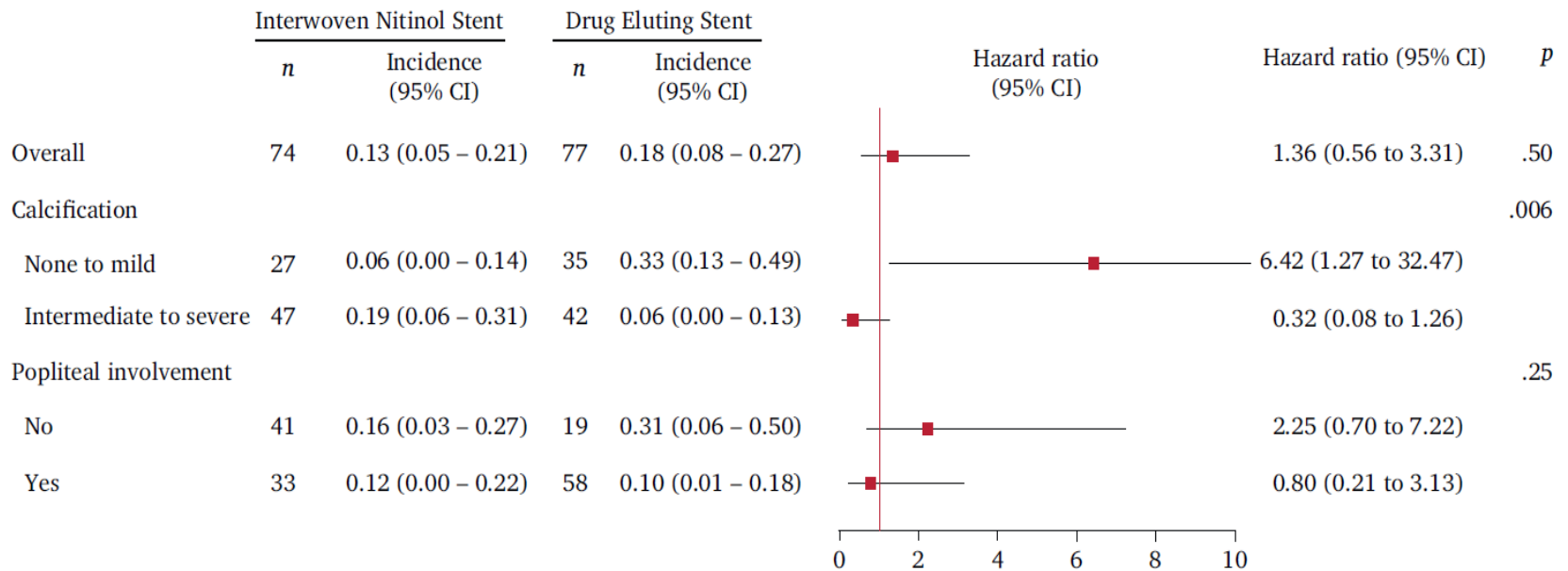
Statistical analysis (n=234)



RESULTS I – Primary endpoint



RESULTS II – Pre-defined subgroups



a) Calcification

- Significant interaction with stent type (p 0.006)
not confirmed by sensitivity analyses

b) Popliteal Involvement

- No interaction with stent type (p 0.25)

Interwoven nitinol stents (INS) versus drug eluting stents (DES) in the femoro-popliteal segment: A propensity matched analysis

121 case matched pairs (INS vs. DES)

- TLR 31% vs. 27% $p = .34$
- stent occlusion 13% vs. 12% $p = .85$
- secondary patency rate 87% vs. 88%
- Major amputation 10% vs. 6% $p = .16$
- Require re-intervention 14% vs. 9% $p = .12$
- Mortality 7% vs. 4% $p = .31$

Plaque calcification did not predict restenosis or occlusion in either stent group.

Conclusion

- Biased differences in patient and lesion characteristics
 - INS vs DES stent groups
 - vessel preparation
- No statistical difference in CD-TLR (INS vs DES)
 - including calcified or popliteal artery lesions
- Individualized decision making
 - lesion length/diameter