

## BERN Registry

Evaluate long segment (> 120 mm) complex femoro-popliteal disease with Pulsar stent stratified for Critical Limb Ischaemia (CLI) vs Intermittent Claudication (IC)<sup>1</sup>

### Conclusions

- Endovascular stenting of long femoro-popliteal lesions using the Pulsar-18 stent provides acceptable results with patency and restenosis rates comparable with data from literature for stenting of long femoro-popliteal obstructions

### Study design

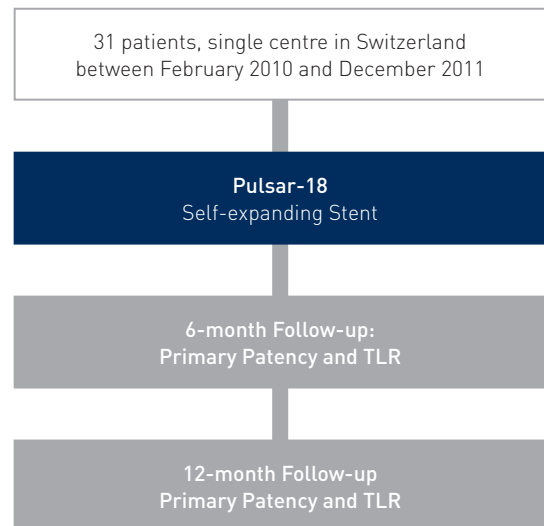
- Single centre, retrospective registry
- 31 patients with 12 months follow-up

### Principal Investigator

- P.I. Prof Nicolas Diehm, Inselspital, Bern

### Endpoints

- Primary patency (PP), Technical success, Procedural complications
- Freedom from Target Lesion, Revascularization (FTLR)
- Stratified for Critical Limb Ischemia (CLI) vs. Intermittent Claudication (IC)



<sup>1</sup> Baumann F, D.-D. Do, Willenberg T, Baumgartner I, Diehm N. Treatment of long-segment femoro-popliteal obstructions: initial experience with a 4F compatible self-expanding nitinol stent and review of the literature. J Cardiovasc Surg 2012;53:475-80

## Patient demographics

	Total N = 31	IC N = 18	CLI N = 13	p-value
Hyperlipidemia	71.0 %	61.1 %	84.6 %	0.23
Hypertension	80.6 %	77.8 %	84.6 %	1.0
Diabetes	35.5 %	27.8 %	46.2 %	0.5
Smoker	61.3 %	66.7 %	53.8 %	0.71

## Lesion characteristics

	Total	IC	CLI	p-value
Number of lesions	31	18	13	1.0
Occlusions	90.3 %	94.4 %	84.6 %	0.56
Average lesion length	16.4 ± 3.3 cm	15.4 ± 3.4 cm	17.7 ± 2.6 cm	0.05
Primary intervention	77.4 %	77.8 %	76.9 %	1.0
Redo intervention	22.6 %	22.2 %	23.1 %	1.0

## Results

	Total	IC	CLI	p-value
Technical success	100 %	100 %	100 %	-
Procedural complications	0 %	0 %	0 %	-
Primary patency	61.1 %	64.1 %	54.9 %	0.84
FTLR	77.8 %	85.9 %	64.0 %	0.43

## BERN registry in perspective

Study	Number of patients	IC	CLI	Average lesion length	Clinical endpoints	Clinical outcomes 12-month
BERN	31	58.1 %	41.9 %	16.4 cm	PP	61.1 %
					FTLR	77.8 %
Durability-200 (EverFlex) <sup>1</sup>	100	71 %	29 %	24.2 cm	PP	64.8 %
					FTLR	68.2 %
Soga <sup>2</sup>	511	76 %	24 %	15.1 cm	PP	79.8 %
					SP	90.4 %
Scheinert (Zilver PTX >14 cm) <sup>3</sup>	193	-	-	22.1 cm	FTLR	77.0 %
Ihnat <sup>4</sup>	95	65 %	35 %	15.7 cm	PP	52.0 %*
					AP	64.0 %*
					SP	59.0 %*

AP = Assisted Patency SP = Secondary Patency \* = 36 months follow-up

<sup>1</sup> Bosiers M, Deloose K, Callaert J, Moreels N, Keirse K, Verbist J et al. Results of the Protege EverFlex 200-mm-long nitinol stent (ev3) in TASC C and D femoropopliteal lesions. J Vasc Surg 2011;54:1042-50.

<sup>2</sup> Soga Y, Iida O, Hirano K, Yokoi H, Nanto S, Nobuyoshi M. Mid-term clinical outcome and predictors of vessel patency after femoropopliteal stenting with self-expandable nitinol stent. J Vasc Surg 2010;52:608-15.

<sup>3</sup> Scheinert D. Interim Report on the Zilver® PTX™ (Drug-Eluting Stents in the SFA) Clinical Study, Subgroup Analysis-Long Le-sions 7<sup>th</sup> edition of the Leipzig Interventional Course (LINC). Jan 25-28, 2012.

<sup>4</sup> Ihnat DM, Duong ST, Taylor ZC, Leon LR, Mills JL, Sr., Goshima KR et al. Contemporary outcomes after superficial femoral artery angioplasty and stenting: the influence of TASC classification and runoff score. J Vasc Surg 2008;47:967-74.