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# Endovascular femoro-popliteal bypass grafting via the femoral vein (PQ Bypass) - the DETOUR I study

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# DISCLOSURE

Speaker name:

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I do not have any potential conflict of interest concerning the content of this presentation



## SFA - REVSCULARSATION CAN BE CHALLENGING

- Procedural CTO fail-to-cross very common
- Mechanical Restoring adequate blood flow through 20+ cm of disease
- Physiological Not possible to resuscitate an ischemic vessel





#### THE LONG SEGMENT SFA DISEASE TREATMENT OPTIONS





### THE DETOUR PERCUTANEOUS BYPASS PROCEDURE

#### DESIGNED TO BE A FIRST-LINE TREATMENT FOR LONG SEGMENT SFA (TASC C & D) LESIONS



#### TORUS<sup>™</sup> Stent Graft



#### **DETOUR** Crossing Kit





## DETOUR I CLINICAL TRIAL (FIRST IN MAN)

#### No Exclusions for CTO, ISR, or Severe Calcification

#### Design

- DESIGN: Prospective, single-arm, multi-center clinical evaluation of the DETOUR<sup>TM</sup> System and technique for percutaneous bypass
- ENDPOINTS: 30 day MAE and 6 month primary patency (Met primary endpoints)

#### • STATUS

- CE Mark granted Feb 2017
- Patients being followed to 24 months

78 patients/82 limbs enrolled at 8 global sites

77 patients/81 limbs with DETOUR<sup>™</sup> implanted

First patients at 12 months with lesion length <u>></u> 30cm (core lab)

23 Patients / 25 Lesions

Extreme Lesion Analysis 12 Month Results of Long Lesion Sub-Analysis Presented



#### DETOUR I EXTREME LESION ANALYSIS

### 12 Month Analysis of Initial Patients with Lesions ≥ 30 cm N=23 Patients / 25 Lesions

Baseline Lesion and Clinical Characteristics		Image size: 912 x 555 WL: 80 WW: 709scular/ngio_Konzynowa_Clenkowarstwowe (Adult A-B: 25 33 on B-C: 33.96 cm A-C: 59.29 cm
Lesion Length, cm (mean $\pm$ SD)	35.9 ± 4.1	AND C
Total Occlusions, % (n/N)	92.0% (23/25)	Lesion Length ~34cm
De novo Lesions, % (n/N)	64.0% (16/25)	
Age, years (mean ± SD)	67 ± 7.4	
Male Gender, % (n/N)	73.9% (17/23)	
History of Smoking, % (n/N)	91.3% (21/23)	
R-B Classification, (mean $\pm$ SD)	$3.0 \pm 0.2$	Zoom: 250% Im: 1/1 Series: 5 JPEGLossless:Non-higharchical-1stOrderPrediction Made In OsiriX



#### DETOUR I EXTREME LESION ANALYSIS: PATENCY

#### 12 Month Analysis of Initial Patients with Lesions ≥ 30 cm N=23 Patients / 25 Lesions



<sup>1</sup>Patient 03-011 was exited from the study following surgical treatment for thrombosis post 1-month follow-up.



## DETOUR I EXTREME LESION ANALYSIS: PERFORMANCE AND SAFETY

### I2 Month Analysis of Initial Patients with Lesions ≥ 30 cm N=23 Patients / 25 Lesions

Key Secondary Performance Endpoints		Image size: 912 x 555 WL: 227 WW: 741 A-B: 23.39 cm B-C: 43.70 cm A-C: 67.09 cm
Technical Success	100% (25/25)	
Procedural Success	96% (24/25)	
Key Secondary Safety Endpoints at 30 Days		Lesion Length ~44cm
Freedom from Deep Vein Thrombosis	100% (25/25)	
Freedom from Death	100% (23/23)	1 A A
Freedom from Amputation	100% (25/25)	
Freedom from Acute Limb Ischemia	96% (24/25)	
Freedom from TVR	96% (24/25)	Zoom: 289% Im: 1/1 Series: 6 JPEG2000 8/27/14, 12:57:58 PM Made In OsiriX



## DETOUR I EXTREME LESION ANALYSIS: HEMODYNAMIC IMPROVEMENT

#### 12 Month Analysis of Initial Patients with Lesions ≥ 30 cm N=23 Patients / 25 Lesions



<sup>1</sup>p-values are calculated using paired t-test for matched data

<sup>2</sup>I subject missing ABI/ Rutherford at Baseline

<sup>3</sup>Patient 03-011 was exited from the study following surgical treatment for thrombosis post 1-month follow-up



## DETOUR I EXTREME LESION ANALYSIS: FUNCTIONAL STATUS

### I2 Month Analysis of Initial Patients with Lesions ≥ 30 cm N=23 Patients / 25 Lesions







## DETOUR I EXTREME LESION ANALYSIS: CONCLUSIONS

12 Month Analysis of Initial Patients with Lesions  $\geq$  30 cm

Initial experience with the DETOUR System and procedure demonstrates durability without compromising venous health

DETOUR I demonstrated improved outcomes in patients with the longest, most complex of lesions

Next step: DETOUR II IDE to expand the safety and effectiveness profile of the DETOUR procedure and continue to build the body of clinical evidence



# KEY LESSON FROM DETOUR I TRIAL

#### Don't fear the Profunda

- Landing level-to or slightly proximal to the Profunda / SFA bifurcation is optimal
- Optimal placement can minimize edge stenosis



Proximal stent graft placed ~ 5.2 mm distal to the optimal landing position; edge stenosis at 6 months

