

Below-the-knee dedicated sirolimus eluting stent : 6 months results

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Treatment of BTK lesions











- Safety & feasibility study with IVascular Angiolite BTK BX DES as bail out in BTK procedures
- > Start Aug 2016
- Single center, physician initiated, prospective, real-life, non randomized trial
- > N= 50 patients
- > Rutherford-Becker : 4-5-6







Primary Endpoints

- Safety & feasibility using IVascular Angiolite BTK BX DES in BTK bail out procedures
- Absence of clinically driven target lesion revascularization @ 12 months

Secondary Endpoints

- > Technical success defined as a successful access and deployment of the device and determined by less than 30 % residual stenosis by angiography at the baseline procedure.
- Clinical success defined as technical success without the occurrence of serious adverse events during procedure







Secondary Endpoints

- Primary and secondary patency rate (duplex ultrasound) defined as < 50 % diameter reduction and peak systolic velocity < 2.4 at 12 months
- > Ankle-Brachial Index improvement of ≥ 0.1 (ABI before procedure compared with ABI at 1,6,9 & 12 months)
- Clinically driven Target Vessel Revascularization at 6, 9 and 12 months
- Major complications at 6,9 and 12 months, including amputation of a part of the foot, the leg below and above the knee
- The Rutherford-Becker classification of chronic limb ischemia at 1,
 6, 9 and 12 months post procedure







Open cell design



angiolite BTK



New peripheral drug-eluting

stent system

STENT MATERIAL

DRUG

DRUG DOSE

FLUOROPOLYMER

RECOMMENDED GUIDEWIRE RX catheter

CoCr L605 Sirolimus 1,4 µg/mm² Biostable 0.014 inch

Stent	Working catheter length: 142 cm								
diameter	Stent length (mm)								
(mm)	9	14	16	19	24	29	34	39	
2.00	SCC DSR14 150 200 009	SCC DSR14 150 200 014	SCC DSR14 150 200 016	SCC DSR14 150 200 019	SCC DSR14 150 200 024	SCC DSR14 150 200 029	SCC DSR14 150 200 034	SCC DSR14 150 200 039	
2.25	SCC DSR14 150 225 009	SCC DSR14 150 225 014	SCC DSR14 150 225 016	SCC DSR14 150 225 019	SCC DSR14 150 225 024	SCC DSR14 150 225 029	SCC DSR14 150 225 034	SCC DSR14 150 225 039	
2.50	SCC DSR14 150 250 009	SCC DSR14 150 250 014	SCC DSR14 150 250 016	SCC DSR14 150 250 019	SCC DSR14 150 250 024	SCC DSR14 150 250 029	SCC DSR14 150 250 034	SCC DSR14 150 250 039	
2.75	SCC DSR14 150 275 009	SCC DSR14 150 275 014	SCC DSR14 150 275 016	SCC DSR14 150 275 019	SCC DSR14 150 275 024	SCC DSR14 150 275 029	SCC DSR14 150 275 034	SCC DSR14 150 275 039	
3.00	SCC DSR14 150 300 009	SCC DSR14 150 300 014	SCC DSR14 150 300 016	SCC DSR14 150 300 019	SCC DSR14 150 300 024	SCC DSR14 150 300 029	SCC DSR14 150 300 034	SCC DSR14 150 300 039	
3.50	SCC DSR14 150 350 009	SCC DSR14 150 350 014	SCC DSR14 150 350 016	SCC DSR14 150 350 019	SCC DSR14 150 350 024	SCC DSR14 150 350 029	SCC DSR14 150 350 034	SCC DSR14 150 350 039	
4.00	SCC DSR14 150 400 009	SCC DSR14 150 400 014	SCC DSR14 150 400 016	SCC DSR14 150 400 019	SCC DSR14 150 400 024	SCC DSR14 150 400 029	SCC DSR14 150 400 034	SCC DSR14 150 400 039	
4.50	-	SCC DSR14 150 450 014	SCC DSR14 150 450 016	SCC DSR14 150 450 019	SCC DSR14 150 450 024	SCC DSR14 150 450 029	SCC DSR14 150 450 034	SCC DSR14 150 450 039	





- 77 y male
- > Diabetes type1
- > AHT
- > AMI/PTCA/CABG
- > Hypercholesterolemia
- > 5x PTA fempop region
- > Rutherford Becker 5
- > Ulcers D1/D3/D5



































































Baseline Patient Demographics : n = 50

Male Gender	35
Mean Age	71.1
Mean BMI	31.7
Nicotine abuse (present & past) (%)	88
Hypertension (%)	84
Hypercholesterolemia (%)	56
Diabetes (type 1 & 2) (%)	72
Vascular History (%)	48
Recurrent disease (%)	34
Coronary History (%)	58
Cerebrovascular History (%)	22
Renal insufficiency (%)	58







4	18
5	23
6	9
	$\mathbf{N} = \mathbf{C}\mathbf{A}$
	N = 64
Tibioperoneal Trunc	24
Anterior Tibial Artery	16
Peroneal Artery	15
Posterior Tibial Artery	9



RUTHERFORD CATEGORY



N = 50



Procedure		
Vessel preparation		
	Predilatation / balloonangioplasty	49
	Primary stenting	15
Mean lesion length	51.45 mm	
Reference vessel diamete	3.43 mm	
Mean stenosis before tre	93.43 %	
Number of occlusions	52%	
Presence moderate to he	78%	
Use of DCB (mainly for di	34%	







Procedure	
Stents used	68
Tibioperoneal Trunc	24
Anterior Tibial artery	18
Peroneal Artery	15
Posterior Tibial Artery	11
Mean stent diameter	3.32 mm
Mean stent length	32.1 mm
Number stents / patient	1,36
1	34
2	14
3	2







Procedure			
Access site			
ipsilateral	43		
cross-over	7		
Mean residual stenosis at end of procedure (%)	18.5%		
Mean Heparine (IU)	6250IU		
Mean contrast	94.5 ml		
Patients + CO ² angio	26		
Access hemostasis closure device	47/50		
Technical success (<30% diameter residual stenosis)	100		







- > Post procedure :
 - Aspirin (for life) + clopidogrel (min 6 mo)
 - Anticoagulation or NOAC + clopidogrel (6 mo)
- > Follow-up:
 - 1,3,6,9,12 (18,24, 36) months ultrasound
 - ♦ 2-14months
- > Death:3
 - ◆ D41 : AMI
 - ◆ D87 : sepsis/MOF
 - D135 : cardiovascular





(preliminary %)

	30 days	6 Mo	9 Mo	12 Mo	18 Mo
Primary Patency	100 %	88%			
Secondary Patency	100 %	96%			
Freedom TLR	100 %	94%			
Freedom of major amputation	98 %	94%			
Freedom minor amputation	77.6%	72 %			Looking Forward

RUTHERFORD CATEGORY	6 Mo N= 44	9 Mo	12 Mo	18 Mo
1	3			
2	14			
3	12			
4	9			
5	6			
6	0			

(N = 44= 50 - 3 amp - 3 +)



After 2 weeks



Clinical outcome

After 5 weeks









Clinical outcome

After 7 weeks











Conclusions

- > Use of Angiolite BTK is safe and feasible
- > Positive effect on revascularization/wound healing
- Longer term follow-up is needed to confirm the advantages of the use of the Angiolite BTK BX DES





Thank you for your attention



Vascular Clinic ZNA