

The logo for LING, featuring a stylized graphic of a curved line in blue, red, and yellow, with the word "LING" in white capital letters to its right.

LING

BIOLUX P-III

Passeo-18 Lux All-comers Registry: 12-month Results for the All-Comers Cohort

Prof. Dr. Gunnar TEPE,
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CCI on behalf of the BIOLUX P-III Investigators

Disclosure

Speaker name: **Prof. Dr. Gunnar TEPE**

I have the following potential conflicts of interest to report:

- Consulting : BIOTRONIK
- Employment in industry
- Stockholder of a healthcare company
- Owner of a healthcare company
- Other(s)
- I do not have any potential conflict of interest

Passeo-18 Lux Paclitaxel-Coated Balloon



Passeo-18 balloon Platform

- Controlled compliance
- Low profile
- Highly deliverable

Paclitaxel : 3 $\mu\text{g}/\text{mm}^2$

Excipient: BTHC (Butyryl-tri-hexyl citrate)

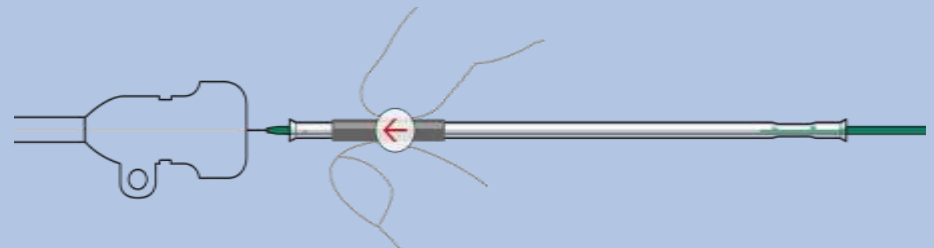
- Hydrophobic

Sizes available :

- 2.0 – 7.0 mm diameter
- 40-80-120 mm length

SAFE GUARD Insertion Aid

- Protects the user and coating from contact and damage
- Reduces drug loss due to friction within the introducer sheath
- Pre-mounted on the balloon and does not require any preparation prior to use



Passeo-18 Lux Clinical Program

BIOLUX P-I 

RCT Passeo-18 Lux vs PTA, femoro-popliteal artery
(N= 60 pts)

BIOLUX P-II 

RCT Passeo-18 Lux vs PTA, infra-popliteal artery
(N= 72 pts)

BIOLUX P-IV 

Prospective, single arm study, femoro-popliteal artery
(N= 158 pts)

BIOLUX P-III 

Global Prospective Registry, infra-inguinal artery
(N= 882 pts)

**BIOLUX P-III
BENELUX** 

Prospective Registry, focus on isolated Popliteal Lesions
(N= 100 pts)

**BIOLUX P-III
SPAIN** 

Prospective Registry, focus on Long Lesions
(N= 150 pts)

BIOLUX P-III Study Design

DESIGN:

- Prospective, global, multi-centre, Real-World All-Comers registry

STUDY GOALS:

- Further investigate Passeo-18 Lux DCB Efficacy and Safety in Infra-inguinal arteries, in a Real-World Environment

PRIMARY ENDPOINTS:

- Freedom from MAE¹ at 6 months
- Freedom from CD-TLR² at 12 months

(1) Major Adverse Event : Composite of device and procedure related mortality through 30 days, major target limb amputation and clinically driven target lesion revascularization (TLR). MAE are adjudicated by an independent Clinical Events Committee

(2) Clinically driven TLR is any re-intervention performed for $\geq 50\%$ diameter stenosis (visual estimate) at the target lesion after documentation of recurrent clinical symptoms of the patient

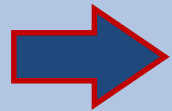
BIOLUX P-III Study Incl./Excl. Criteria

Inclusion Criteria

- Lesion(s) in the infra-inguinal arteries suitable for endovascular intervention, treated with or scheduled to be treated with the Passeo-18 Lux drug coated balloon

Exclusion Criteria

- Failure to successfully cross the target lesion with a guide wire



BIOLUX P-III is **the only Real -World Registry in Infra-inguinal arteries :**

- ✓ No patient characteristic limitations
- ✓ No lesion characteristic limitations
- ✓ Use of additional devices allowed
- ✓ 47 sites, 16 countries (EU, Australia, Asia)

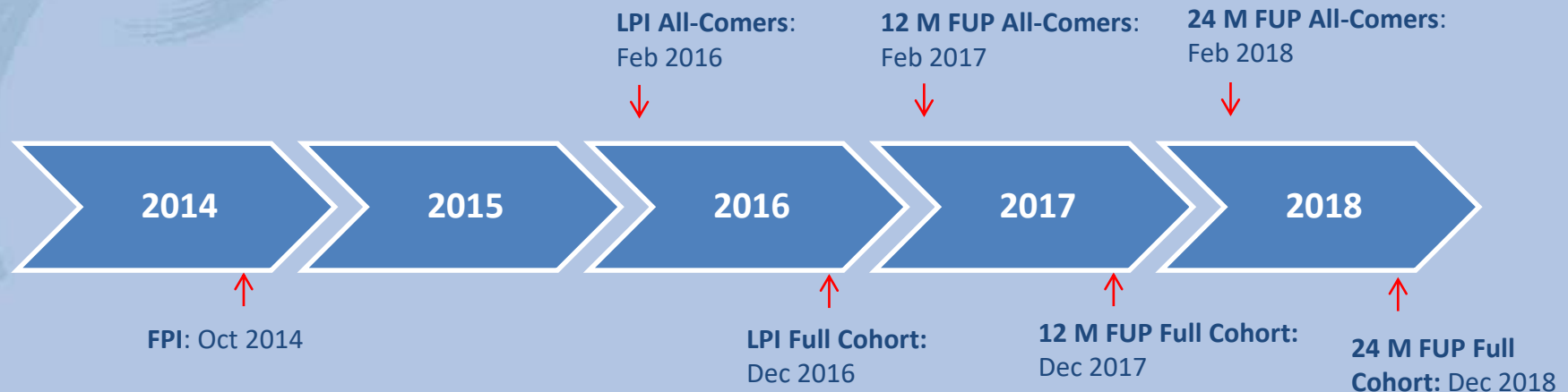
BIOLUX P-III Cohorts

All-Comers Cohort

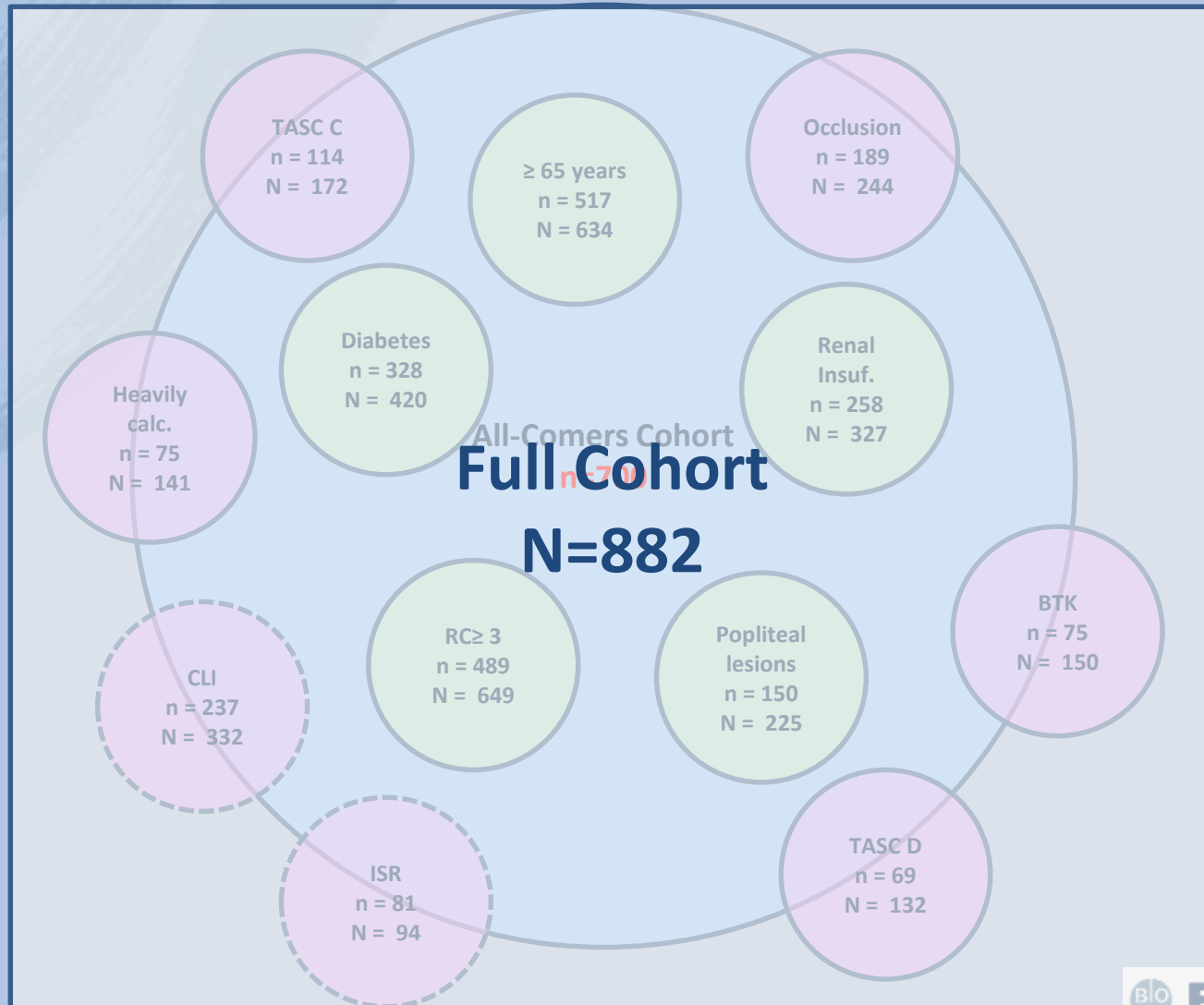
- N= **700** Subjects
- Representative sample of consecutive subjects treated with Paseo-18 Lux DCB

Full Cohort

- N= **882** Subjects
- Enrolment was extended to complete some predefined subgroups



BIOLUX P-III Cohorts and Subgroups



n = # subjects from the subgroup in the All-Comers population

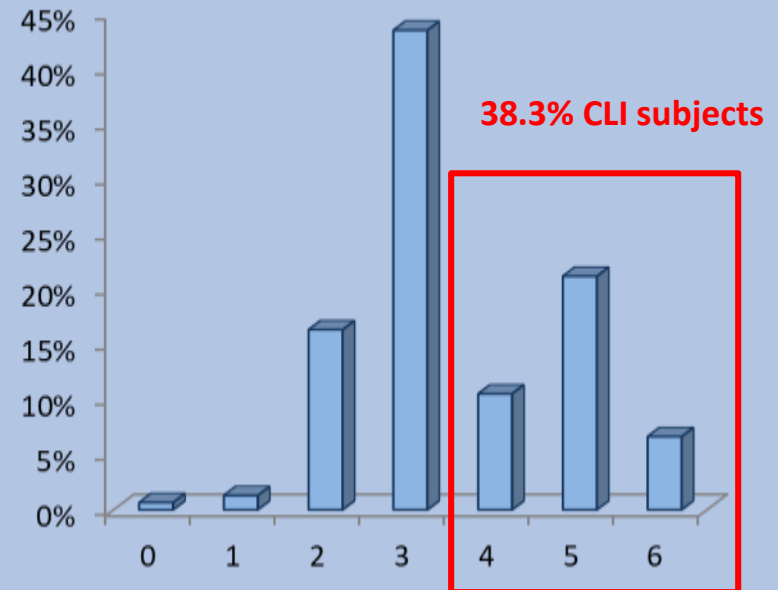
N = # subjects from the subgroup in the Full Cohort population



Not pre defined subgroup

Baseline Characteristics **All-Comers**

| | |
|---------------------------------------|-------------|
| # Subjects | N = 700 |
| Age, yrs (mean ± SD) | 70.0 ± 10.2 |
| Male (n, %) | 439 (62.7%) |
| Hypertension (n, %) | 595 (85.0%) |
| Hyperlipidemia (n, %) | 472 (67.4%) |
| Smoking (n, %) | 483 (69.0%) |
| <i>Current Smokers</i> | 191 (39.5%) |
| History of PAOD (n, %) | 411 (58.7%) |
| Previous PVI /Surgeries (n, %) | 373 (53.3%) |
| Diabetes (n, %) | 330 (47.1%) |
| Coronary Artery Disease (n, %) | 295 (42.1%) |
| Cerebrovascular Disease (n, %) | 145 (20.7%) |
| Renal Disease (n, %) | 255 (36.4%) |
| ABI target limb (mean± SD) | 0.7 ± 0.2 |



Rutherford Classification

Lesion Characteristics **All-Comers**

| Lesion Characteristics | N=864 |
|---|-------------|
| Lesion Length, mm (mean ± SD) | 84.6+/-73.3 |
| Reference Vessel Diameter, mm (mean ± SD) | 4.8+/-1.0 |
| Diameter Stenosis (%) | 86.4+/-12.9 |
| De novo Lesion (n, %) | 466 (53.9%) |
| Occlusion (n, %) | 205 (23.7%) |
| In Stent Restenosis (n, %) | 97 (11.2%) |
| Re-Stenosis (n, %) | 96 (11.1%) |
| Calcification (n,%) | |
| None | 216 (25.1%) |
| Mild | 283 (32.8%) |
| Moderate | 260 (30.2%) |
| Heavy | 103 (11.9%) |
| TASC Classification (n,%) | |
| A | 361 (42.2%) |
| B | 269 (31.4%) |
| C | 143 (16.7%) |
| D | 83 (9.7%) |

| Lesion Location | N (%) |
|---------------------|-------------|
| Common femoral | 9 (1.0%) |
| SFA | 492 (56.9%) |
| Popliteal artery | 194 (22.5%) |
| ATA | 37 (4.3%) |
| PTA | 20 (2.3%) |
| Tibioperoneal trunc | 28 (3.2%) |
| Peroneal artery | 19 (2.2%) |
| Dorsalis Pedis | 1 (0.1%) |
| Other | 64 (7.4%) |

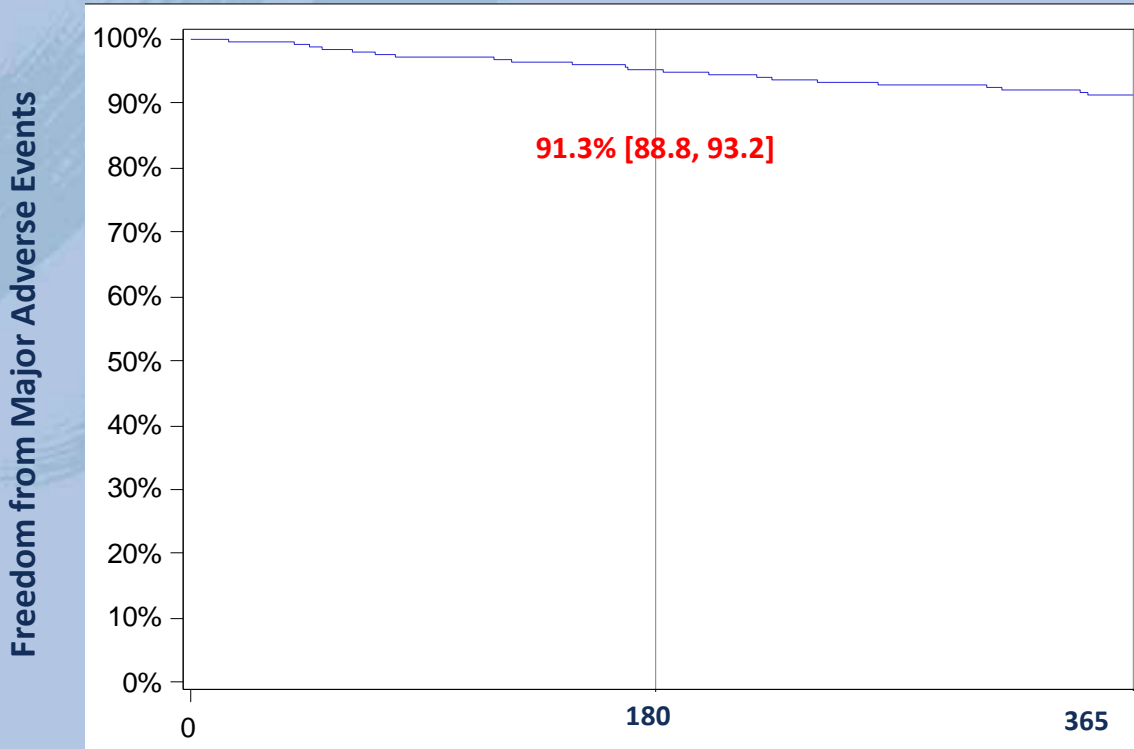
- 👉 **74.9% of lesions calcified**
- 👉 **42.1% moderate to heavy calcified lesions**
- 👉 **26.4% lesions are TASC C/D**
- 👉 **12.2% BTK lesions**

Procedure Details **All-Comers**

| | |
|--------------------------------|------------------------|
| Vessel Preparation | 72.5% (626/864) |
| Pre-dilation | 64.7% (559/864) |
| Cutting/scoring balloon | 4.2% (36/864) |
| Rotational thrombectomy | 3.2% (28/864) |
| Atherectomy | 1.9% (16/864) |
| Technical success ¹ | 98.6% (852/864) |
| Bailout Stenting | 16.7% (144/864) |

(1) Technical success: Successful completion of the endovascular procedure and immediate morphological success with $\leq 50\%$ residual diameter reduction of the treated lesion (visual estimation)

Major Adverse Events¹ All-Comers



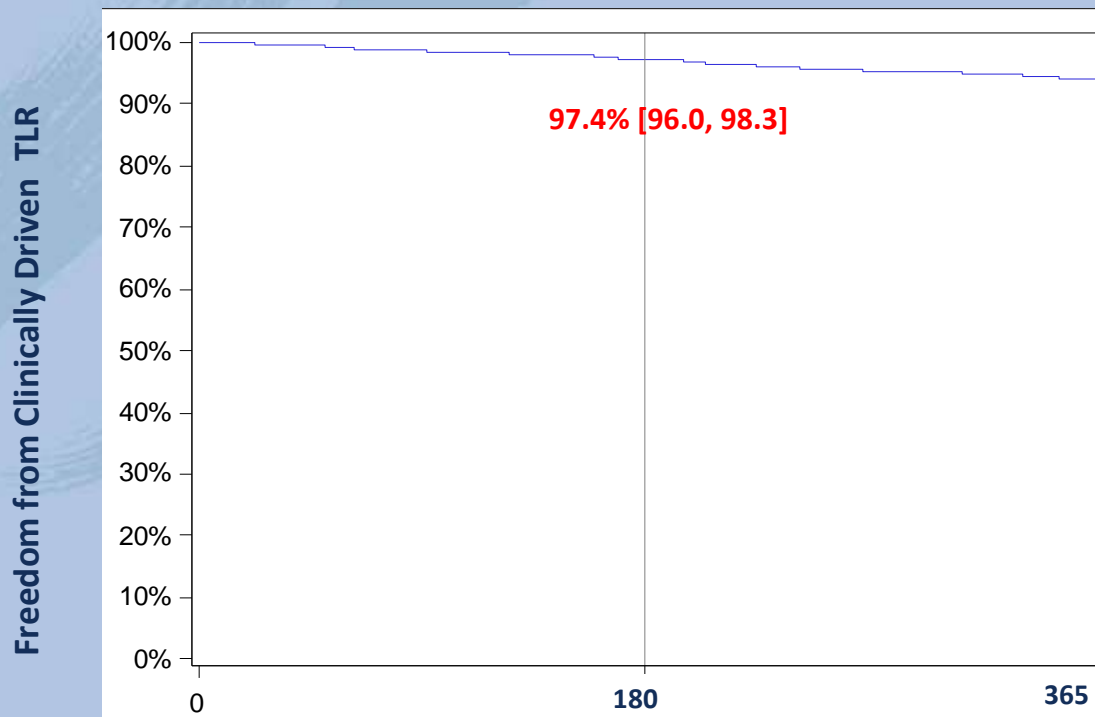
95.3% [93.4, 96.6]

| Key Baseline Characteristics | |
|------------------------------|---------------------------------|
| TASC C/D | 26.4% |
| Calcification | 74.9% (42.1% moderate/heavy) |

| Description | 180 days | 365 days |
|-----------------------------|----------|----------|
| Left at risk (baseline:700) | 629 | 526 |
| # Events | 32 | 57 |

(1) Major Adverse Event : Composite of device and procedure related mortality through 30 days, major target limb amputation and clinically driven target lesion revascularization (TLR). MAE are adjudicated by an independent Clinical Events Committee

Freedom From Clinically Driven Target Lesion Revascularization¹ **All-Comers**



94.0% [92.1, 95.4]

Key Baseline Characteristics

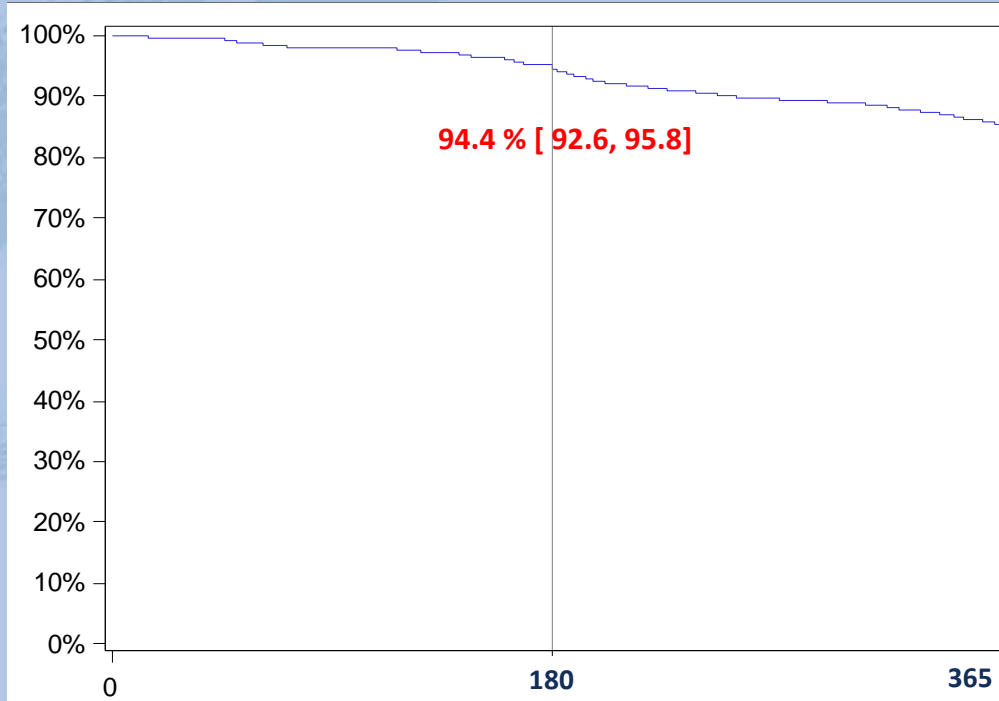
| | |
|---------------|---------------------------------|
| TASC C/D | 26.4% |
| Calcification | 74.9% (42.1% moderate/heavy) |

| Description | 180 days | 365 days |
|--------------------------------|----------|----------|
| Left at risk (baseline:864) | 788 | 660 |
| # Events | 22 | 48 |

(1) Any re-intervention performed for $\geq 50\%$ diameter stenosis (visual estimate) at the target lesion after documentation of recurrent clinical symptoms of the patient adjudicated by an independent CEC

Primary Patency¹ All-Comers

Primary Patency



85.2% [82.5, 87.5]

Key Baseline Characteristics

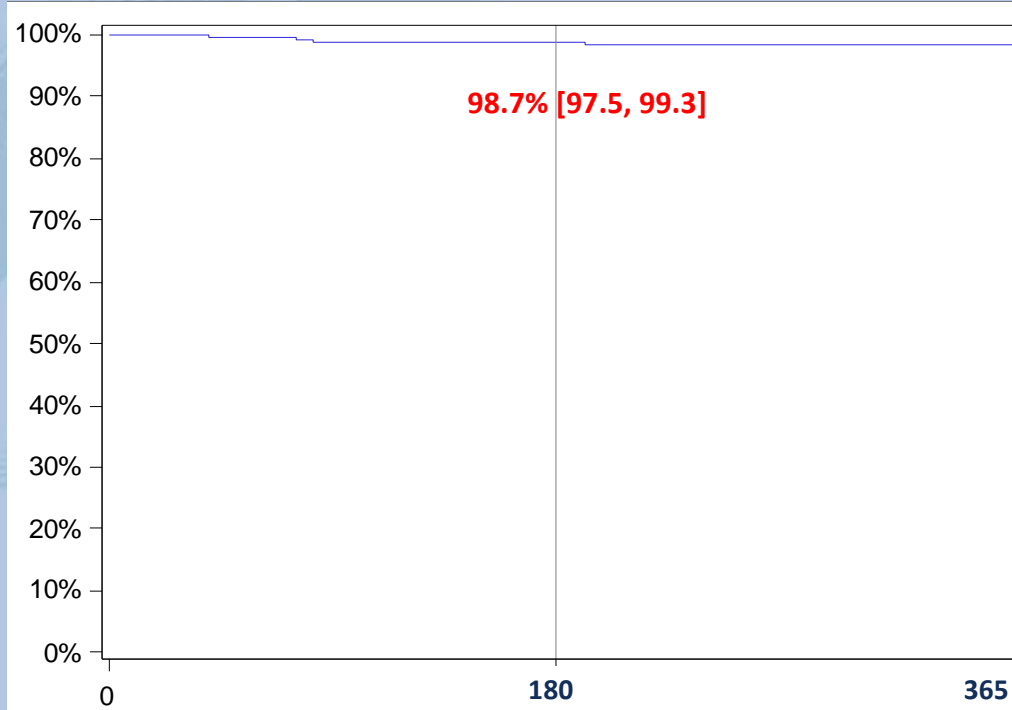
| | |
|---------------|---------------------------------|
| TASC C/D | 26.4% |
| Calcification | 74.9% (42.1% moderate/heavy) |

| Description | 180 days | 365 days |
|--------------------------------|----------|----------|
| Left at risk (baseline:864) | 764 | 600 |
| # Events | 46 | 117 |

- (1) Defined as freedom from >50% restenosis in the target lesion as indicated by a duplex ultrasound peak systolic velocity ratio (PSVR) >2.5 or by visual assessment of an angiogram with no clinically driven reintervention
- (2) DUS not mandated _ KM curve based on last contact date

Major Amputations All-Comers

Freedom from Major Amputation



98.4% [97.1, 99.1]

Key Baseline Characteristics

| | |
|---------------|---------------------------------|
| TASC C/D | 26.4% |
| Calcification | 74.9% (42.1% moderate/heavy) |

| Description | 180 days | 365 days |
|--------------------------------|----------|----------|
| Left at risk (baseline:705) | 655 | 570 |
| # Events | 9 | 11 |

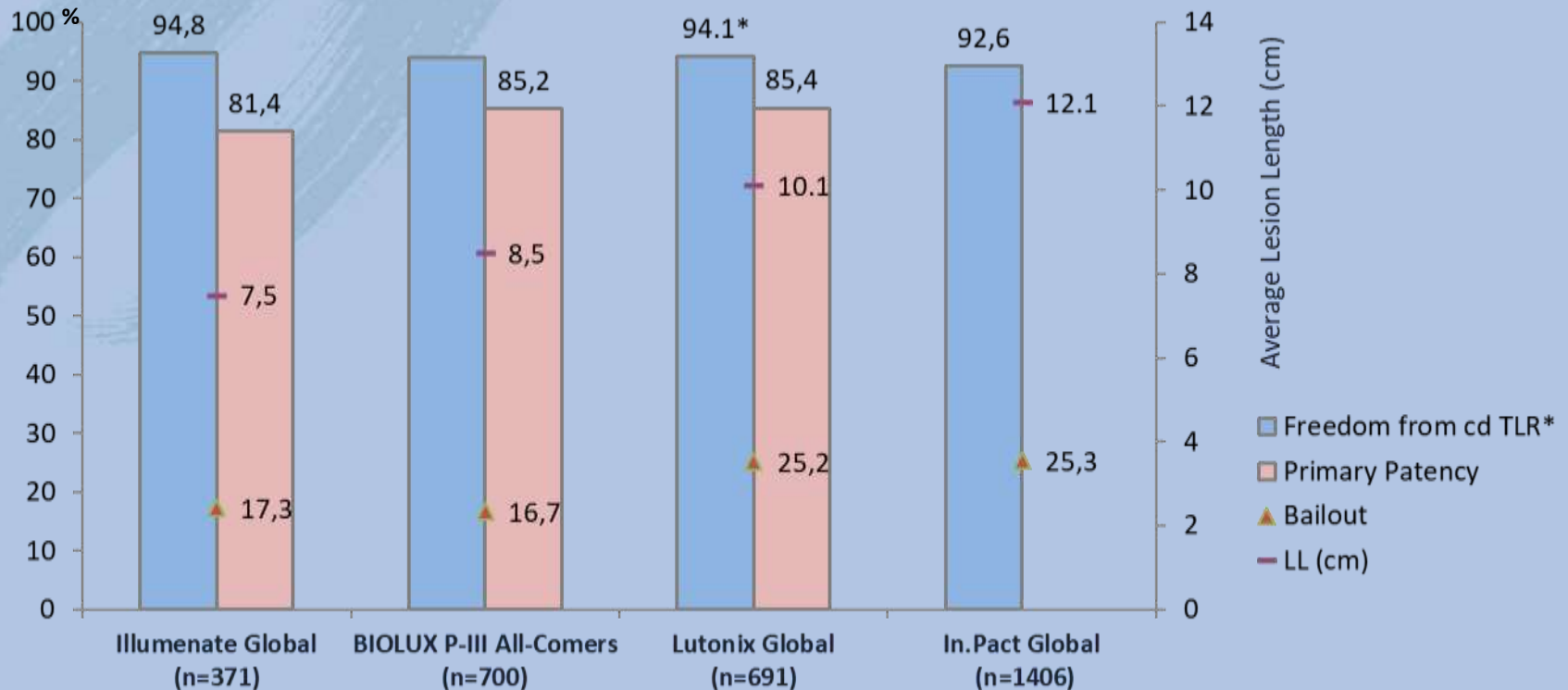
BIOLUX P-III All-Comers

Consistent Results Through Subgroups

| | 12-month Kaplan Meier Estimates | | |
|--------------|---------------------------------|-------------------|---|
| BIOLUX P-III | Freedom from cd TLR | Primary Patency | Freedom from Major target limb amputation |
| All-comers | 94.0% [92.1-95.4] | 85.2% [82.5-87.5] | 98.4% [97.1-99.1] |
| SFA | 94.4% [91.8-96.1] | 85.3% [81.6-88.2] | 98.5% [96.7-99.3] |
| CLI | 91.2% [87.1-94.1] | 84.7% [79.7-88.5] | 95.9% [92.3-97.9] |

BIOLUX P-III All-Comers

Passero-18 Lux shows comparable 12-m Outcomes in complex lesions



Illumenate Global : Schroe H. et al, Catheter Cardiovasc Interv 2017

Lutonix Global: Thieme M. et al, JACC: Cardiovascular Interventions 2017

In.Pact Global: Jaff MR, VIVA 2016

*Freedom from TLR

Chart for illustration purpose only

Conclusion

- ❑ Despite almost 75% of calcified lesions, **only 16.7 % of the treated lesions required a stent**
- ❑ BIOLUX P-III 12-month outcomes confirm Passeo-18 Lux DCB safety and effectiveness in **infra-inguinal arteries** of a **700 patients** all-comers cohort:
 - ❑ **85.2% Primary Patency**
 - ❑ **94.0% Freedom from Clinically-Driven TLR**
 - ❑ **8.7% MAE**
 - ❑ **1.6% Major target limb amputations**
- ❑ The results are comparable to other global DCB registries investigating femoropopliteal arteries only
- ❑ Benefit is consistently shown in a high risk population such as CLI

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