ILLUMENATE Global:
2-year results with the Stellarex DCB in femoropopliteal lesions

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On behalf of Dr. Andrew Holden, Prof. Yann Gouëffic and the ILLUMENATE Global Investigators

Disclosures

Speaker Name: Prof. Thomas Zeller

I have the following potential conflicts of interest to report:

- [x] Consulting: Medtronic, Bard, Biotronik, Trireme, Spectranetics, 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

ILLUMENATE Global Study Overview

- Prospective, multi-center, single-arm study
- Study device: Stellarex DCB: 2 µg/mm2 ptx with hybrid formulation and PEG excipient
- Patients will be followed for 5 years

Same rigorous data collection process as randomized trials, independent adjudication by:

- *Angiographic Core Laboratory*[1]
- *Duplex Ultrasound Core Laboratory*[2]
- *Clinical Events Committee*
- *Data Safety Monitoring Board*

Monitoring with 100% source data verification

1. Beth Israel Deaconess Medical Center, Boston, MA
2. VasCore, Boston, MA

ILLUMENATE Global Study Overview

Study Objective: Assess safety and performance of the Stellarex DCB in the SFA and/or popliteal arteries

Primary Safety Endpoint: Freedom from device- and procedure-related death through 30 days and freedom from target limb major amputation and CD-TLR through 12 months

Primary Effectiveness Endpoint: Primary patency at 12 months

Inclusion Criteria

- Rutherford class 2, 3 or 4
- SFA and/or popliteal (down to trifurcation)
- Has at least one patent run-off below-the-knee
- 1 or 2 target lesion(s) with cumulative length ≤ 20 cm
- Target vessel reference diameter 4-6 mm

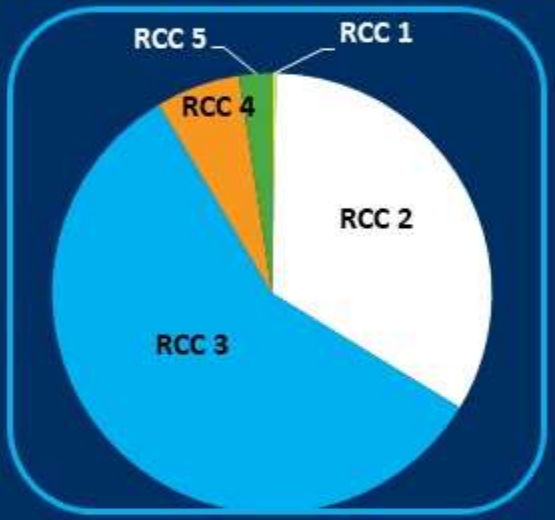
Exclusion Criteria

- Acute or sub-acute thrombus in target vessel
- Significant inflow disease not successfully treated
- In-stent restenosis
- Severe calcification that precludes adequate PTA treatment
- Use of adjunctive therapies (i.e. debulking or plaque incision)

Baseline Patient Characteristics

N (patients)	371
Age	68.2 ± 9.3 (371)
Male	73.0% (271/371)
Diabetes	33.7% (125/371)
Body Mass Index	27.0 ± 4.2 (368)
Hypertension	79.5% (295/371)
Hyperlipidemia	74.7% (277/371)
Previous or Current smoker	81.9% (304/371)
Previous coronary revasc.	33.4% (124/371)
Renal insufficiency	7.0% (26/371)
Previous intervention of lower limb	42.3% (157/371)
ABI	0.70 ± 0.20 (347)

Baseline Rutherford Classes

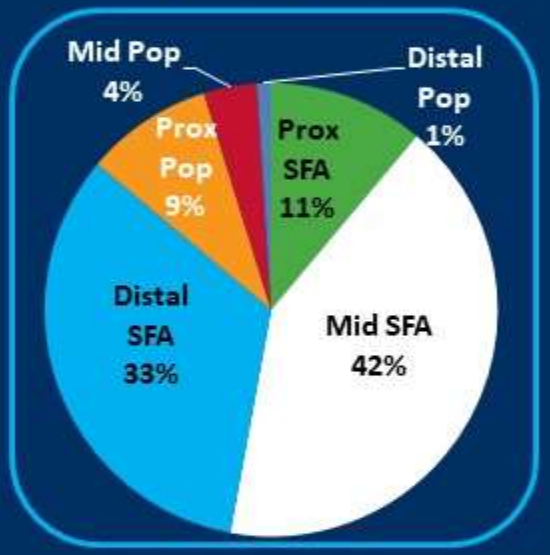


Baseline Angiographic Characteristics

Per Core Lab assessment

N (lesions)	417
De novo[1]	94.0% (392/417)
Lesion Length (cm)	7.5 ± 5.3 (413)
Total occlusions	31.3% (129/412)
Calcification	
None/Mild	43.0% (173/402)
Moderate	16.2% (65/402)
Severe calcification[2]	40.8% (164/402)
Minimum lumen diameter (mm)	0.96 ± 0.87 (412)
Reference vessel diameter (mm)	4.87 ± 0.84 (412)
Baseline diameter stenosis (%)	80.3 ± 17.4 (412)
Eccentric Lesion	60.4% (249/412)

Lesion Location



1. Site reported
2. *Severe calcification*: Radiopacities noted on both sides of the arterial wall and extending more than one cm of length prior to contrast injection or digital subtraction.

Procedural Characteristics

Pre-dilatation[1]	**98.1% (409/417)**
Post-dilatation[1]	28.3% (118/417)
Provisional stent[1]	17.3% (72/417)
Stent Due to Dissection[1]	8.65% (36/417)
Post-DCB Dissections	
Grade D	19.7% (81/416)
Flow-limiting (Grade E or F)	0.2% (1/416)
Post-DCB MLD (mm)	3.43 ± 0.80 (407)
Post-procedure Diameter Stenosis (%)	24.7 ± 11.8 (409)
Lesion Success[2]	97.6% (399/409)

Summary statistics are based on non-missing data

1. Site-reported data
2. Lesion success- Final residual %DS ≤ 50% (per angiographic core lab), after using the DCB

Key Safety Endpoints at 2 Years

- Freedom from Primary Safety Event: 85.3%*

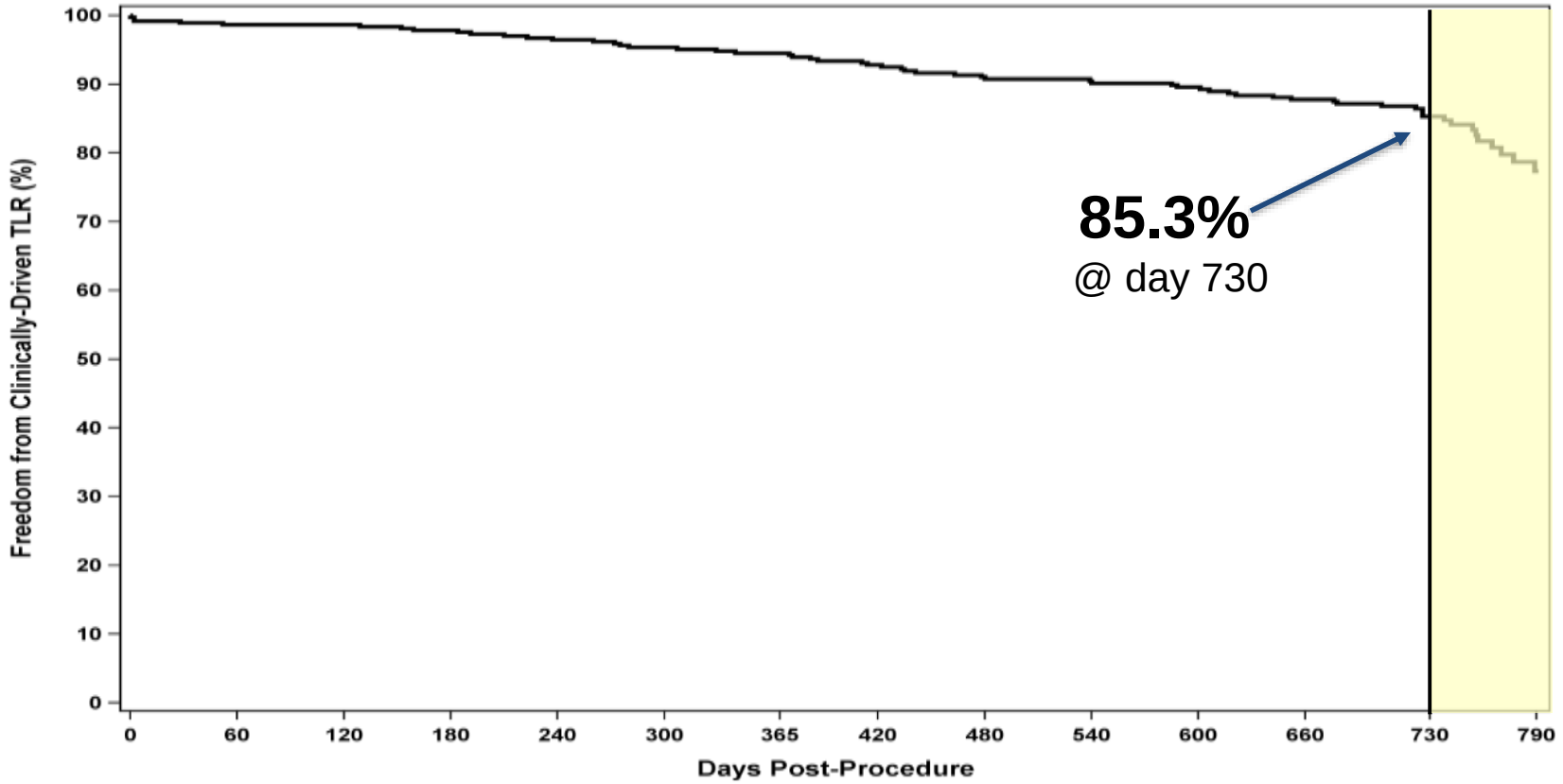
Primary Safety Events	
Device- or procedure-related death	0
Major target limb amputation	1**
Clinically-driven TLR	50

- All-cause mortality through 24 Months†: 2.7% (9/337)
- CD-TLR rate through 24 months†: 17.8% (59/331)

* Per KM estimate at day 730
** Major target limb amputation in subject who was RCC 5 at baseline, following a CD-TLR
†Through day 790, The denominator includes subjects with an event or those without an event having follow-up on or past the opening of the f/u window.

Freedom from CD-TLR* through 2 years

by Clinical Events Committee Adjudication

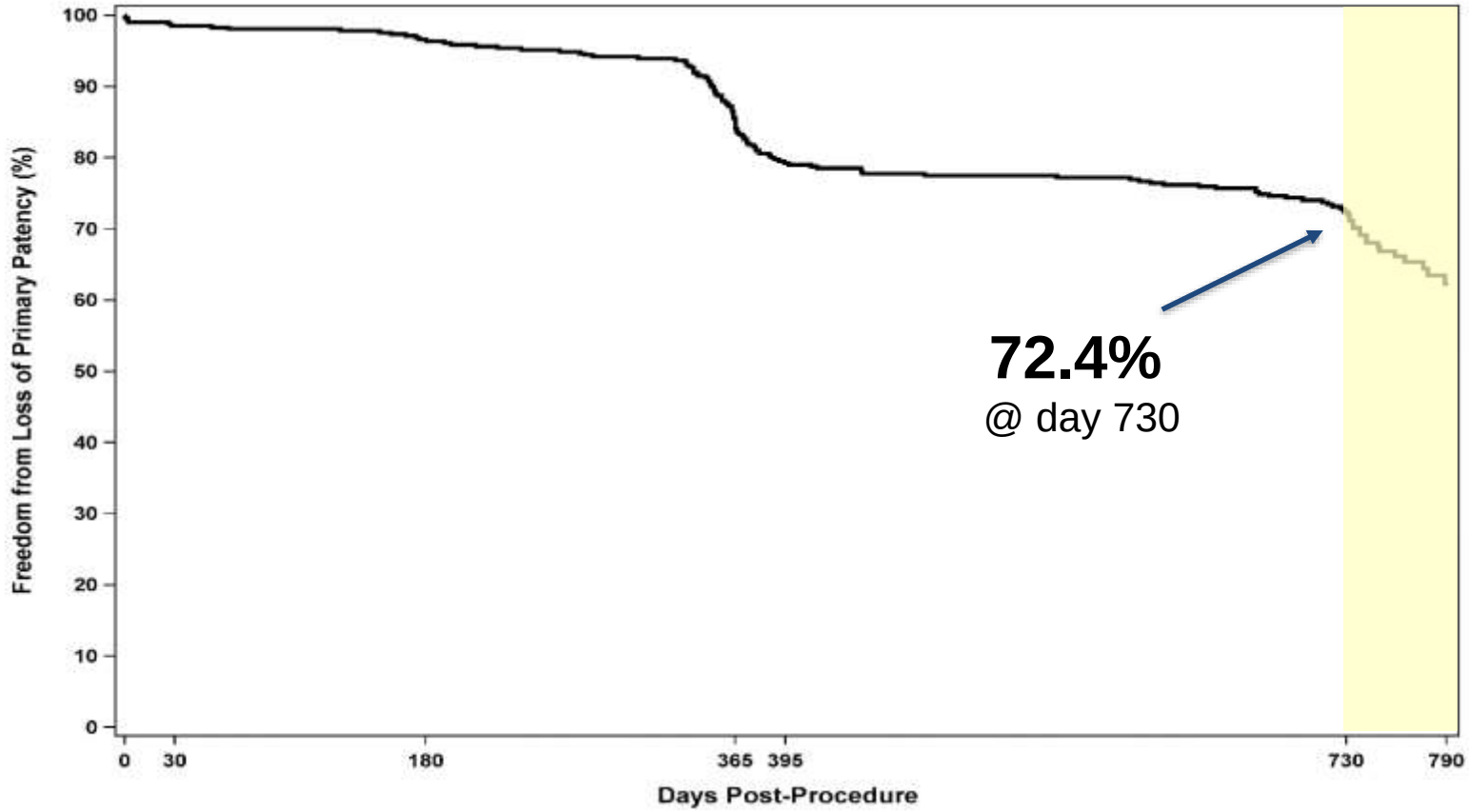


Day	365	730	790
At Risk	335	198	58
Event	20	50	59
Survival (%)	94.5	85.3	77.4

* Defined as revascularization associated with PSVR ≥ 2.5 or >50% stenosis via angiogram and worsening of RCC by more than 1 or ABI decrease of >0.15 from the maximum early post-procedure level, that is clearly referable to the target lesion

Primary Patency through 2 years

by Duplex Core Lab Evaluation



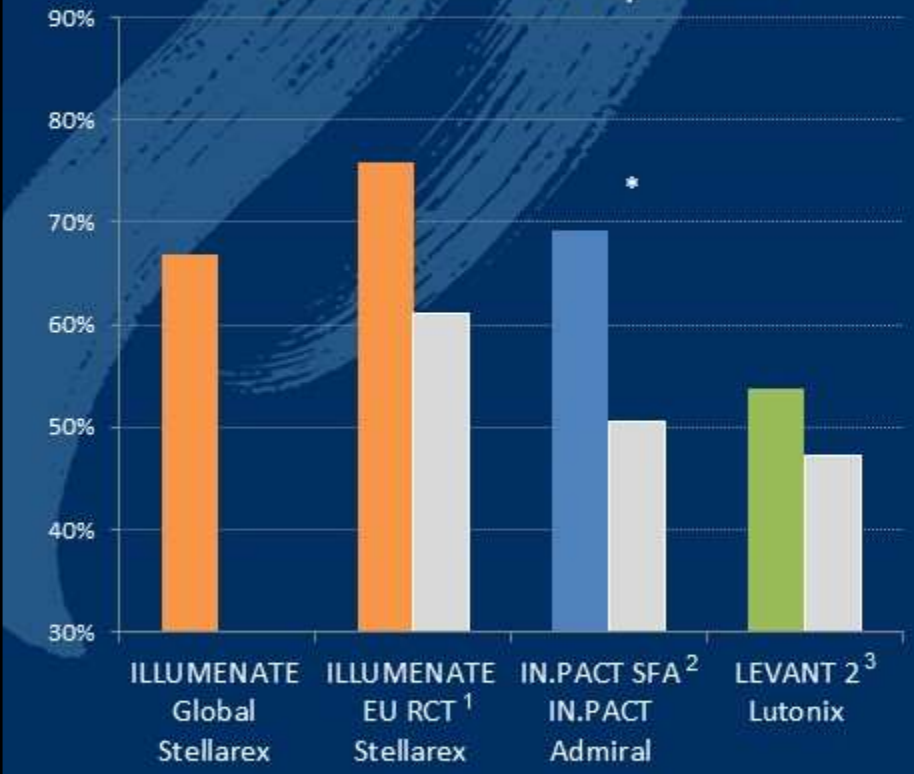
Day	365	395	730	790
At Risk	345	315	189	54
Event	65	84	109	125
Survival (%)	84.1	79.3	72.4	62.3

Primary Patency defined as freedom from Duplex derived restenosis (PSVR ≤ 2.5) and clinically-driven TLR

2- year Patency Rates

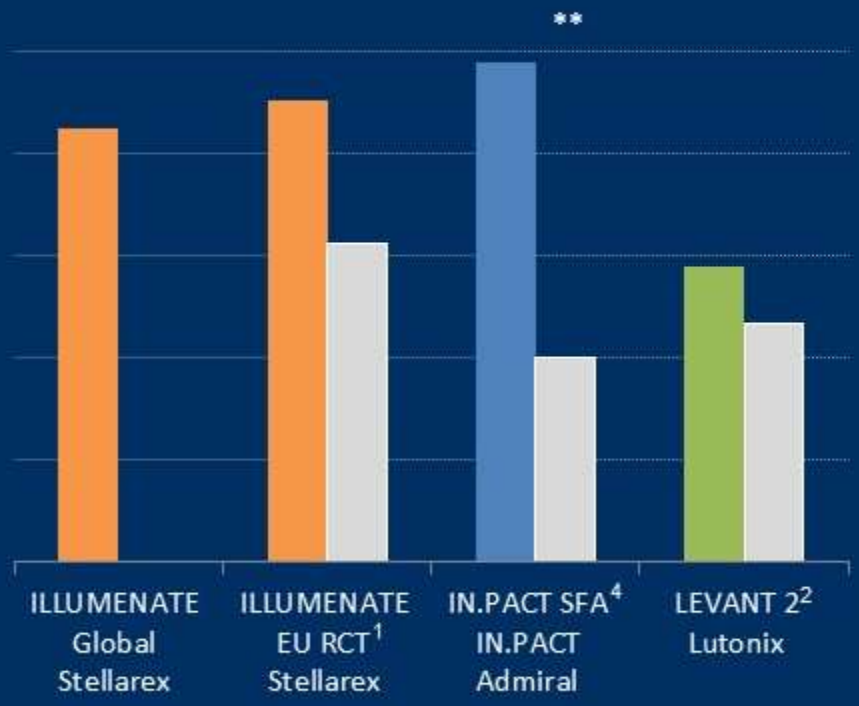
Data in Context with Core Lab* Adjudicated Trials

Exact Rates/ Proportions



*Through 750 days, other trials report through 790 days

Kaplan Meier Estimates

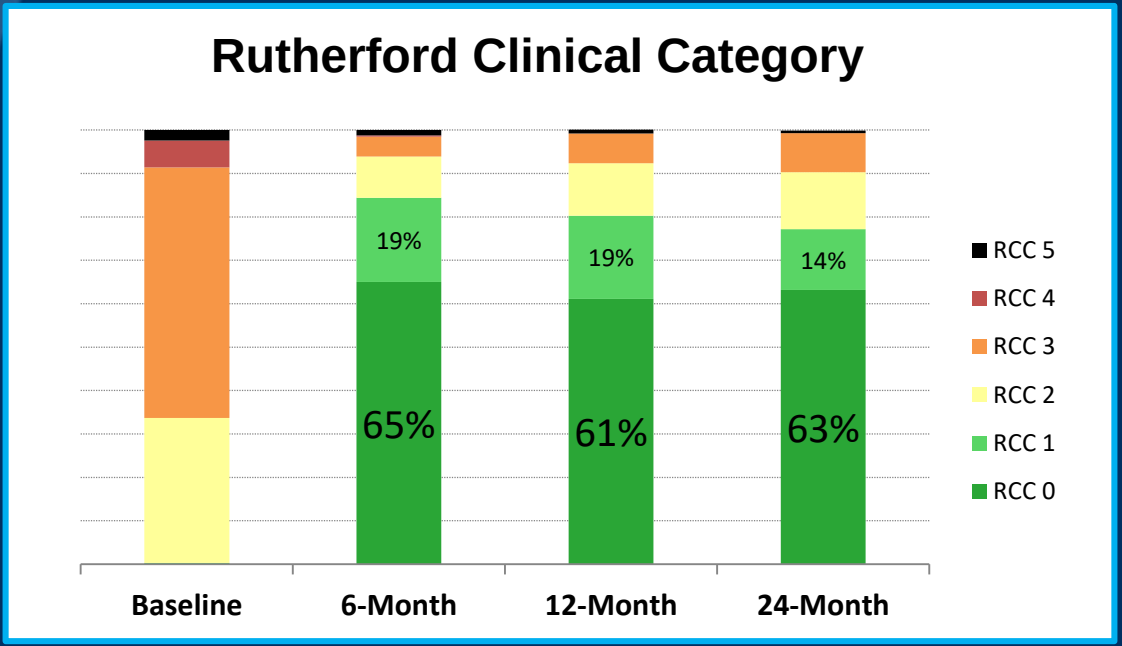


**at day 720 (other trials report rate at day 730)

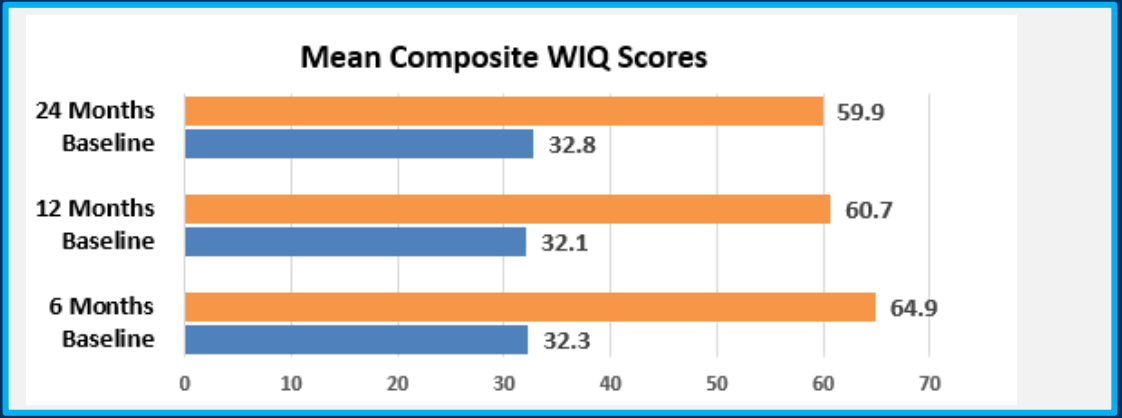
1. M. Brodmann. ILLUMENATE EU RCT: 2-year Results; Oral Presentation. VIVA 2017, Las Vegas, NV. September 11-14, 2017
2. Medtronic IN.PACT Admiral Instructions for Use, Rev. 1F
3. Bard Lutonix Instructions for Use, BAW1387400r3
4. Laird et al. J Am Coll Cardio 2015

Key Secondary Outcomes

- 86.9% of patients assessed at baseline and at 2 years had an improvement in their Rutherford Classification



- 78.4% of subjects had an improvement in their walking impairment questionnaire (WIQ) score at 2 years compared to baseline



*For each analysis time point, only subjects with data available at both baseline and follow-up are included.

ILLUMENATE Global Conclusions

- ILLUMENATE Global, a 371-patient study constitutes one of the largest DCB cohorts with independent core-lab and clinical event committee adjudication
- Durable performance demonstrated through 2 years
  - Primary patency rate: 72.4%
  - Freedom from CD-TLR: 85.3%
- Confirms a low-dose next-gen DCB can deliver sustained patency
- These outcomes build on the robust ILLUMENATE program data set, demonstrating consistent and durable outcomes with the Stellarex DCB

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