

Reflection on use of IN.PACT DCB in Chinese population — a single center perspective

Vascular Surgery Department of Zhongshan Hospital Vascular Surgery Institute of Fudan University National Clinical Research Center for Interventional Medicine

Jianing Yue 岳嘉宁 Weiguo Fu 符伟国

Disclosure

Speaker name:

I have the following potential conflicts of interest to report:

- Consulting
- Employment in industry
- Stockholder of a healthcare company
- Owner of a healthcare company
- Other(s)

I do not have any potential conflict of interest

Background



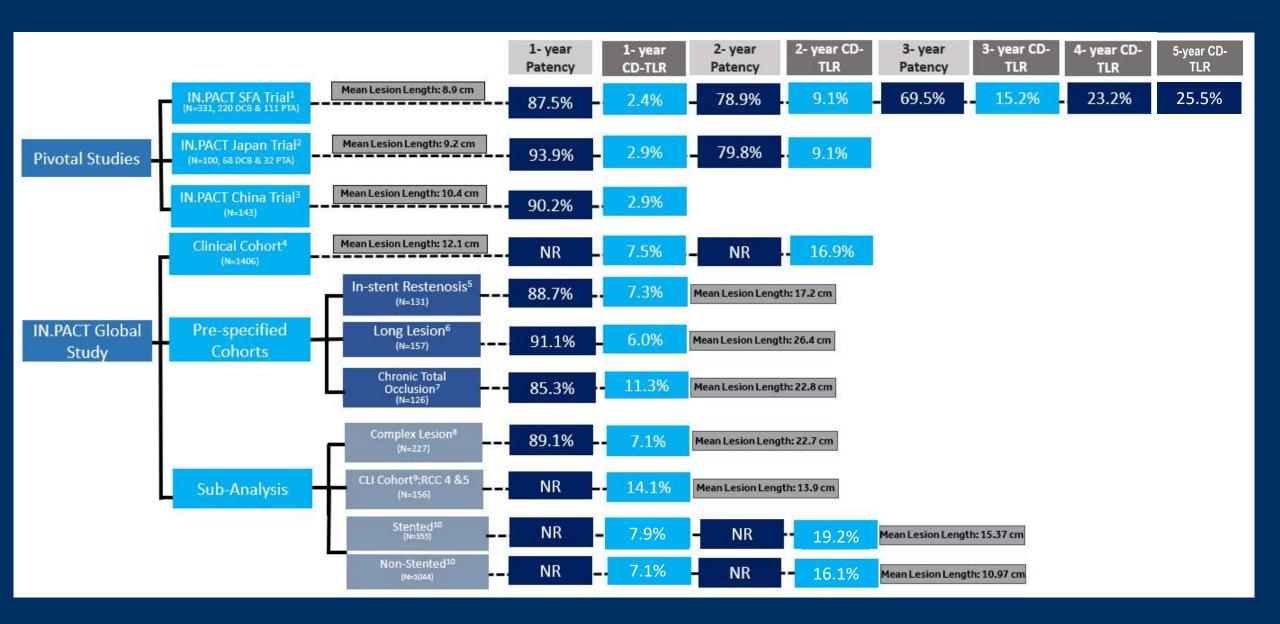
- Drug-coated balloons have shown improved patency results over PTA in randomized trials¹⁻⁷
- IN.PACT[™] Admiral[™] DCB is the only DCB to show long term benefits through 4 years in the IN.PACT SFA trial and 2 years in the IN.PACT Global study^{1-4, 8, 9}
- Performance of DCBs in several populations is still poorly understood

- Laird et al., J Am Coll Cardiol. 2015.
- Krishnan, P. IN.PACT SFA 3 Year Results, VIVA 2016.
- Rosenfield et al., N Engl J Med. 2015.

- 6. Krishnan, P. et al., Circulation. 2017.
- Schroeder, H. et al., Circulation. 2017.
- Jaff, M. IN.PACT Global 1 Year Results, VIVA 2016. 8.
- Schneider, P. IN.PACT SFA 4 Year Results, VIVA. 2017. 9. Zeller, T. IN.PACT Global 2 Year Results, VIVA 2017.

Tepe G. et al., Circulation. 2015.

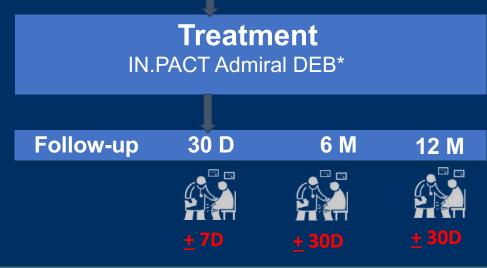
IN.PACT DCB Clinical Program



Prospective, multi-center (15 sites) single-arm study

Study Population

Chinese patients (n=**143**), with de-novo and non stented restenotic lesions in SFA/PPA, RCC 2-4



Rigor Independent Core labs^{1,2},Clinical events committee³

Primary Endpoints

Efficacy Endpoints: Primary patency within 12 months ⁴

Safety Endpoint: 30-day safety composite⁵

Both endpoints were powered and compared to a Performance Goal Derived from the Literature!

- VasCore DUS Core Laboratory, Boston, MA, US
- Beth Israel Deaconess Medical Center, Boston, MA, US
- 3. Clinical Event Committee and Data Safety Monitoring provided by Syntactx, NY, US
- After completion of the clinical trial the study product name has been updated to IN.PACT Admiral Paclitaxel coated PTA balloon catheter which is also referred to as IN.PACT Admiral DCB. The generic name of the product used is Drug Coated Peripheral Balloon Dilating Catheter
- 4. Defined as freedom from clinically-driven TLR and freedom from restenosis as as determined by DUS and PSVR ≤ 2.4 within 12 months postindex procedure.
- 5. Defined as composite of freedom from device- and procedure-related mortality, freedom from major target limb amputation and freedom from clinically-driven TLR within 30 days post-index procedure.

Select Baseline and Procedural Characteristics

Patient Characteristics	N=143 Subjects
Age, Y ± SD	66.8 ± 7.7
Male Gender (%)	74.8% (107/143)
Diabetes Mellitus (%)	46.2% (66/143)
Current Smoker (%)	36.4% (52/143)
	N=143 Subjects
Lesion Characteristics	N=143 Lesions
Lesion Type ^[1]	00.00/ /4.40/4.40)
De novo Restenotic (non-stented)	99.3% (142/143) 0.7 % (1/143)
Lesion length (cm ± SD) ^[2]	10.40 ± 6.51
Total occlusions, % (n) ^[2]	52.4% (75/143)
Severe calcification, % (n) ^[2]	11.9% (17/143)

2. Normal-to-normal by Core Lab QVA evaluation

Procedural Characteristics	N=143 Subjects N=143 Lesions	
Pre-Dilatation (%) ^[1]	100% (143/143)	
Post-dilatation (%) ^[1]	14.0% (20/143)	
Dissections (%) 0 A B-C D E-F	18.9% (27/143) 0.0% (0/143) 55.3% (79/143) 25.9% (37/143) 0.0% (0/143)	
Provisional Stenting (%) ^[1]	4.2% (6/143)	
Device Success (%) ^[3]	97.6% (206/211)	
Procedural Success (%) ^[4]	91.5% (130/142)	
Clinical Success (%) ^[5]	89.4% (127/142)	

3.Device success: Successful delivery, inflation, deflation and retrieval of the intact study balloon without burst < RBP

4. Procedural success: Residual stenosis \leq 50% for non-stented subjects or \leq 30% for stented subjects

5.Clinical success: Procedural success without procedural complications (death, major target limb amputation, thrombosis of target lesion or TVR) prior to discharge

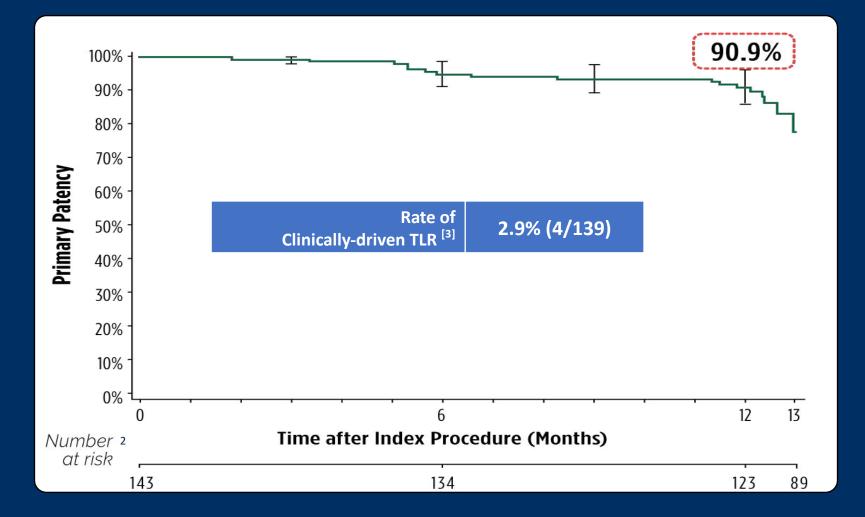
Primary Outcomes

	DEB	95%CI	Performance Goal	p-value	
Primary Efficacy Primary Patency ^[1]	88.6% (109/123)	[81.6%, 93.6%]	50%	< 0.001	
	DEB	95%CI	Performance Goal	p-value	
Primary Safety Composite	99.3% (141/142)	[96.1%, 100.0%]	88%	< 0.001	
Primary endpoints met					

1. Primary Patency is defined as freedom from clinically-driven TLR and freedom from restenosis as determined by duplex ultrasound (DUS) Peak Systolic Velocity Ratio (PSVR) ≤ 2.4 in ITT non-stented subjects.

2. Primary safety composite is defined as freedom from device- and/or procedure-related mortality, freedom from major target limb amputation and freedom from clinically-driven TLR within 30 days post-index procedure in ITT subjects.

IN.PACT SFA China Study 12-Month Primary Patency¹ (ITT)

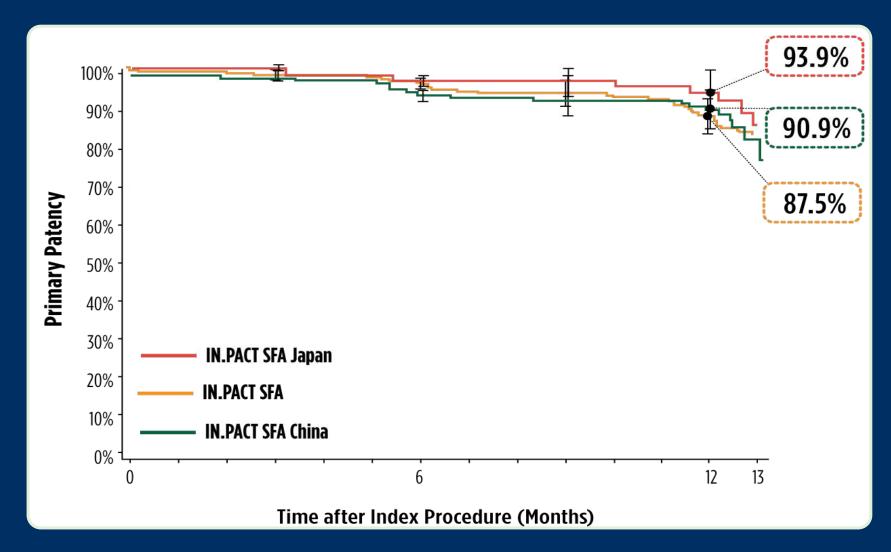


1. Freedom from core laboratory-assessed restenosis (duplex ultrasound PSVR ≤2.4) and clinically-driven target lesion revascularization through 12 months (adjudicated by a Clinical Events Committee)

2. Number at risk represents the number of evaluable subjects at the beginning of the 30-day window prior to each follow-up interval

3. Clinically-driven TLR is defined as any re-intervention at the target lesion due to symptoms or drop of ABI/TBI of ≥20% or >0.15 when compared to post-procedure baseline ABI/TBI.

Consistent Patency Results Across IN.PACT Studies



- 1. Tepe G. et al., IN.PACT SFA 12 Month Results. Circulation 2015; Medtronic IFU Rev 1F.
- 2. lida, O. IN.PACT Japan 12 Month Results. LINC 2017
- 3. Guo,. IN.PACT China 12 Month Results, J. Endo Therapies, June, 2019.

12-month Outcomes Across IN.PACT Trials

	IN.PACT SFA	IN.PACT	IN.PACT	IN.PACT	
	China	Japan ⁴	SFA ¹	Global ²	
	n=143	n=68	n=220	n=1406	
Lesion Length (Mean ± SD, cm)	10.4 ± 6.5	9.2 ± 5.9	8.9 ±4.5	12.1 ± 9.5	
Total Occlusion% (n)	52.4% (75/143)	13.2% (48/364)	25.8% (57/221)	35.5% (629/1773)	
Calcification % (n)	66/143 (46.2)	62.6% (218/348)	59.3% (131/221)	68.7% (1217/1773)	
Severe Calcification% (n)	11.9% (17/143)	8.0% (28/348)	8.1% (18/221)	10.2% (181/1771)	
Provisional Stenting	4.20%	4.40%	7.30%	0.253	
Primary Patency (KM @ 360 days)	90.90%	93.90%	87.50%	NA	
CD-TLR	2.90%	2.90%	2.40%	7.50%	
Any TLR	3.60%	2.90%	2.90%	7.80%	
Mortality	2.90%	0.00%	1.90%	3.50%	
Major Target Limb Amputation	0.00%	0.00%	0.00%	0.20%	
Thrombosis	2.20%	0.00%	1.40%	2.90%	

1. Tepe et al., Circulation 2015; Medtronic Data on File

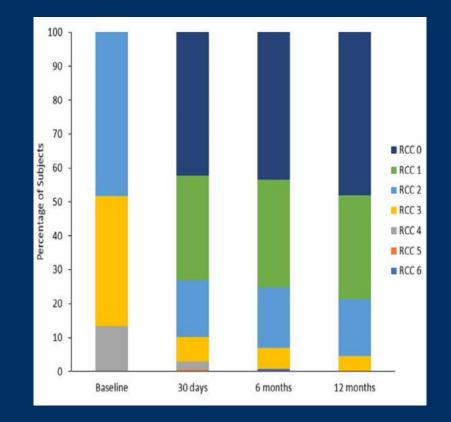
4. lida, O. LINC 2017.

2. Jaff, M. VIVA 2016.

3. Choi, D. LINC 2017.

Functional Outcomes Through 12 Months

	Baseline	12 Months
Ankle-branchial index	0.64±0.22(139)	0.90±0.19(128)
6-minute walk test, m	275.6±104.7(137)	324.4±96.3(126)
Walking Impairment Questionnaire		
Walking impairment	44.1±20.2(141)	71.6±25.5(131)
Walking distance	46.9±29.9(120)	76.7±26.8(86)
Walking speed	37.8±23.2(120)	53.6±27.3(86)
Stair climbing	60.2±31.6(120)	75.4±28.8(86)
EQ-5D index	0.77±0.15(141)	0.86±0.14(131)
EQ-5D Visual Analogue Scale	74.1±13.7(141)	77.6±13.6(131)



Change in Rutherford category through 12 months

(p <0.001 between baseline and 12 months)

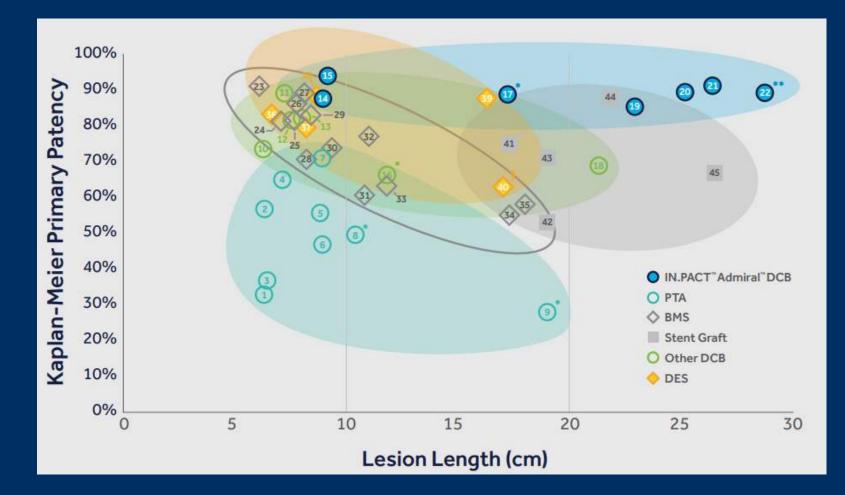
- At 12months, subjects showed improvement compared with baseline in all outcome metrics;
- Transition of all CLI subjects (RCC4) to the claudication categories at the 12-month point.

IN.PACT SFA China Study Summary

Results demonstrate remarkable performance of the IN.PACT[™] Admiral[™] DEB in a Chinese population at 12 months

- By Kaplan-Meier estimate, primary patency at 12 months was **90.9%**
- Results show a low CD-TLR rate of **2.9%** at 12 months
- Study met predefined safety and efficacy objectives
- These data are consistent with outcomes reported from other IN.PACT Trials, showing strong performance of IN.PACT[™] Admiral[™] DCB/DEB

Femoropopliteal Artery Disease Clinical Data Landscape



*ISR studies.

+lida O, et al., report proportion-based patency of the ZEPHYR study.

**Subset analysis of previously reported data. IN.PACT Global Complex Lesion cohort consists of 227 subjects enrolled in the three IN.PACT Global pre-specified imaging cohorts (long lesion, chronic total occlusion, and in-stent restenosis) exhibiting lesion lengths > 18 cm.

¹ Phillips JA, Falls A, Kolluri R, et al. Full Drug-Eluting Stent Jacket: Two-Year Results of a Single-Center Experience With Zilver PTX Stenting for Long Lesions in the Femoropopliteal Arteries. J Endovasc Ther. June 2018;25(3):295-301.





2-year Follow-up







Thank you!