

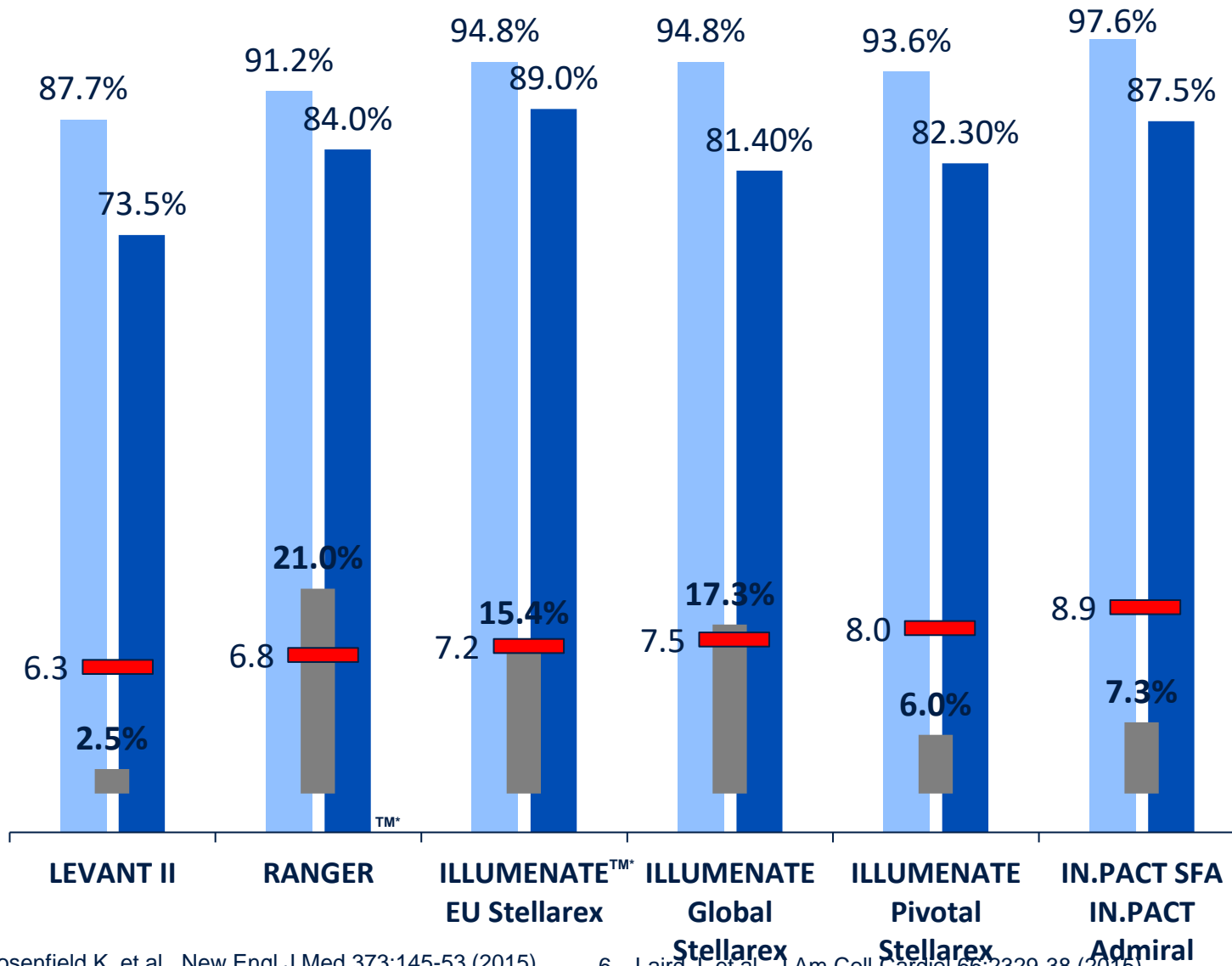
# Preserving the Native Vessel for Future Treatment Options

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*Graz, Austria*



# DCB Data Landscape

## IDE Trials with strict inclusion criteria



1. Rosenfield K, et al. New Engl J Med 373:145-53 (2015)  
 2. Steiner S, et al J Am Coll Cardiol-CI . 10; 934-41 (2018)  
 3. Krishnan P. et al. Circ;136:1102-13 (2017)  
 4. Presented by Lyden S, TCT Washington DC, USA 2016  
 5. Tepe G, et al. Circ 131:495-502 (2015)

6. Laird J, et al. J Am Coll Cardiol 66:2329-38 (2015)  
 7. Thieme, M et al, J Am Coll Cardiol-CI. 0: 1691-3 (2017)  
 8. Bard Lutonix Instructions for Use, BAW1387400r3.  
 9. Scheinert D, et al. CIRC-Cardiovasc Interv;11:e005654 (2018)  
 10. IN.PACT Admiral IFU Rev H.

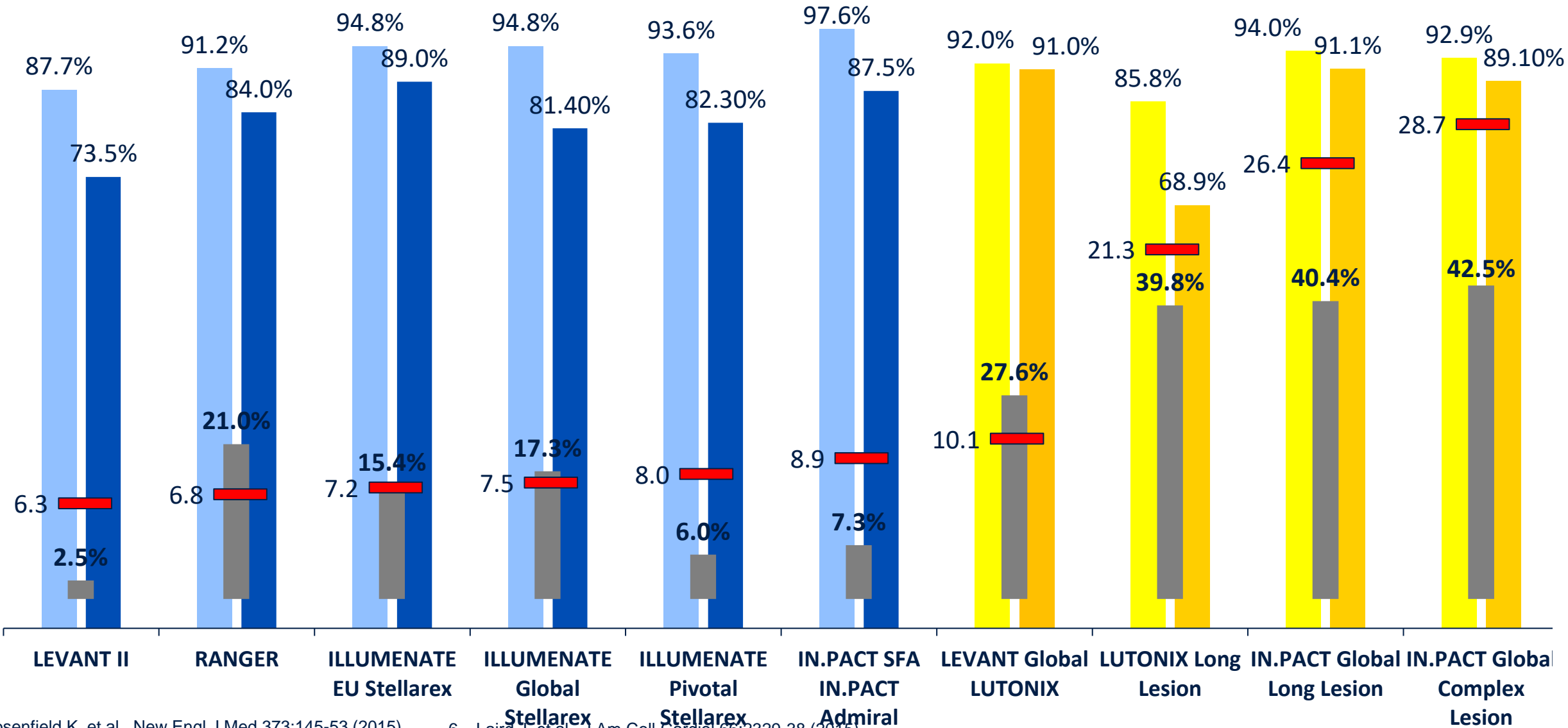
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FF TLR Rate [%]  
 Patency Rate [%]  
 Lesion Length [cm]  
 Prov Stent Rate [%]

# DCB Data Landscape

## IDE Trials with strict inclusion criteria

## Real-world Studies



- Rosenfield K, et al. New Engl J Med 373:145-53 (2015)
- Steiner S, et al J Am Coll Cardiol-CI . 10; 934-41 (2018)
- Krishnan P. et al. Circ;136:1102-13 (2017)
- Presented by Lyden S, TCT Washington DC, USA 2016
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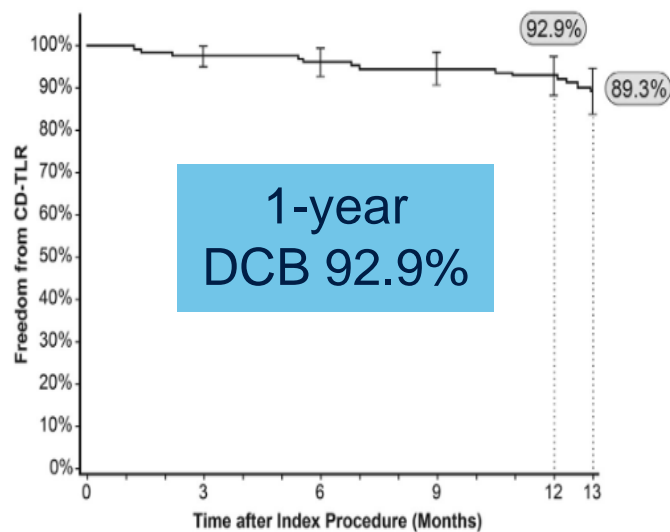
- FF TLR Rate [%]
- Patency Rate [%]
- Lesion Length [cm]
- Prov Stent Rate [%]

# In-Stent Restenosis

# DCB for In-stent Restenosis

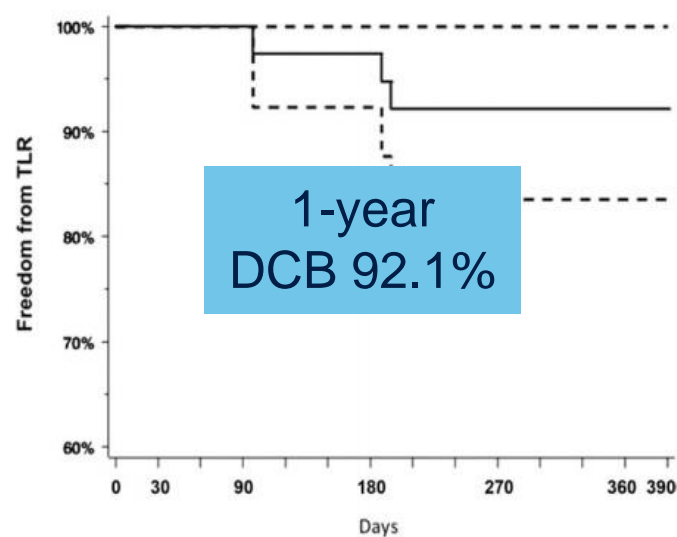
## Freedom from Reintervention

### IN.PACT Global ISR<sup>1</sup>



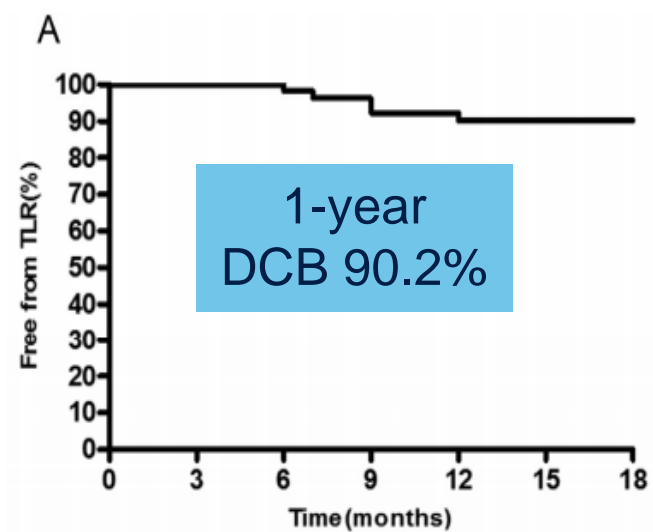
Mean age = 68 y  
 Diabetes = 35.1%  
 LL = 17.2±10.5 cm  
 CTO = 34.0%  
 Prov. Stent = 13.4%

### SFA-ISR<sup>2</sup>



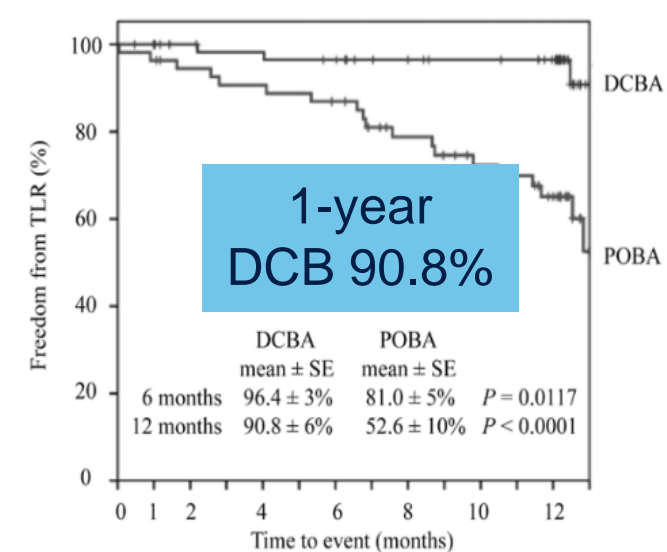
Mean age = 66 y  
 Diabetes = 48.7%  
 LL = 8.3±7.9 cm  
 CTO = 20.5%  
 Prov. Stent = 10.3%

### PLAISIR<sup>3</sup>



Mean age = 69 y  
 Diabetes = 30%  
 LL = 8.6±3.2 cm  
 CTO = 2%

### FAIR<sup>4</sup>

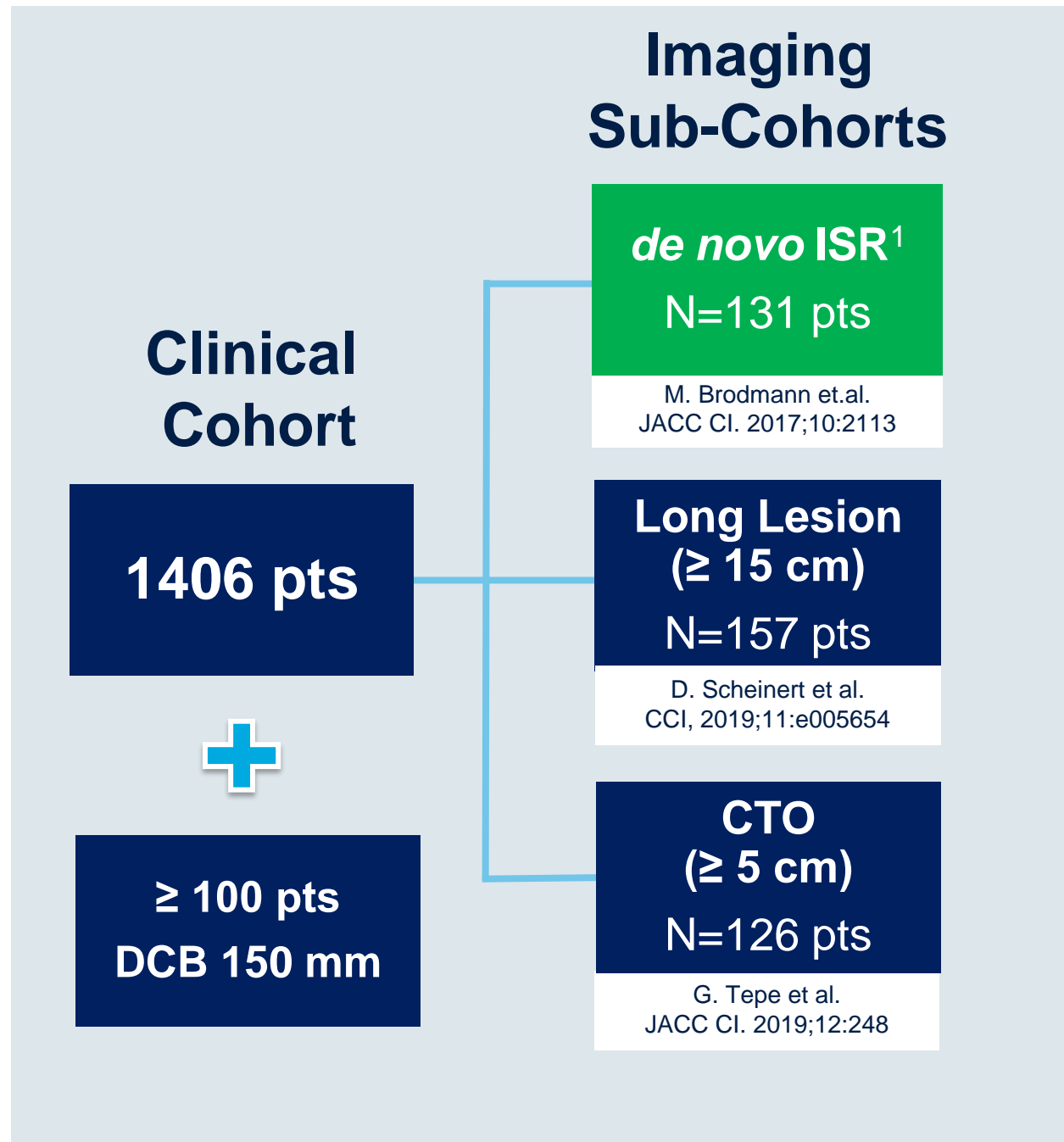


Mean age = 69 y  
 Diabetes = 45%  
 LL = 8.2±7.1 cm  
 CTO = 28.6%  
 Prov. Stent = 1.0%

1. Brodmann et al. *JACC Cardiovasc Interv.* 2017;10:2113-2123  
 2. Stabile et al. *J Am Coll Cardiol.* 2012 Oct 30;60(18):1739-42

3. Bague et al. *Eur J Vasc Endovasc Surg.* 2017 Jan;53(1):106-113  
 4. Krankenberg et al. *Circulation.* 2015 Dec 8;132(23):2230-6

# IN.PACT Global ISR Imaging Cohort



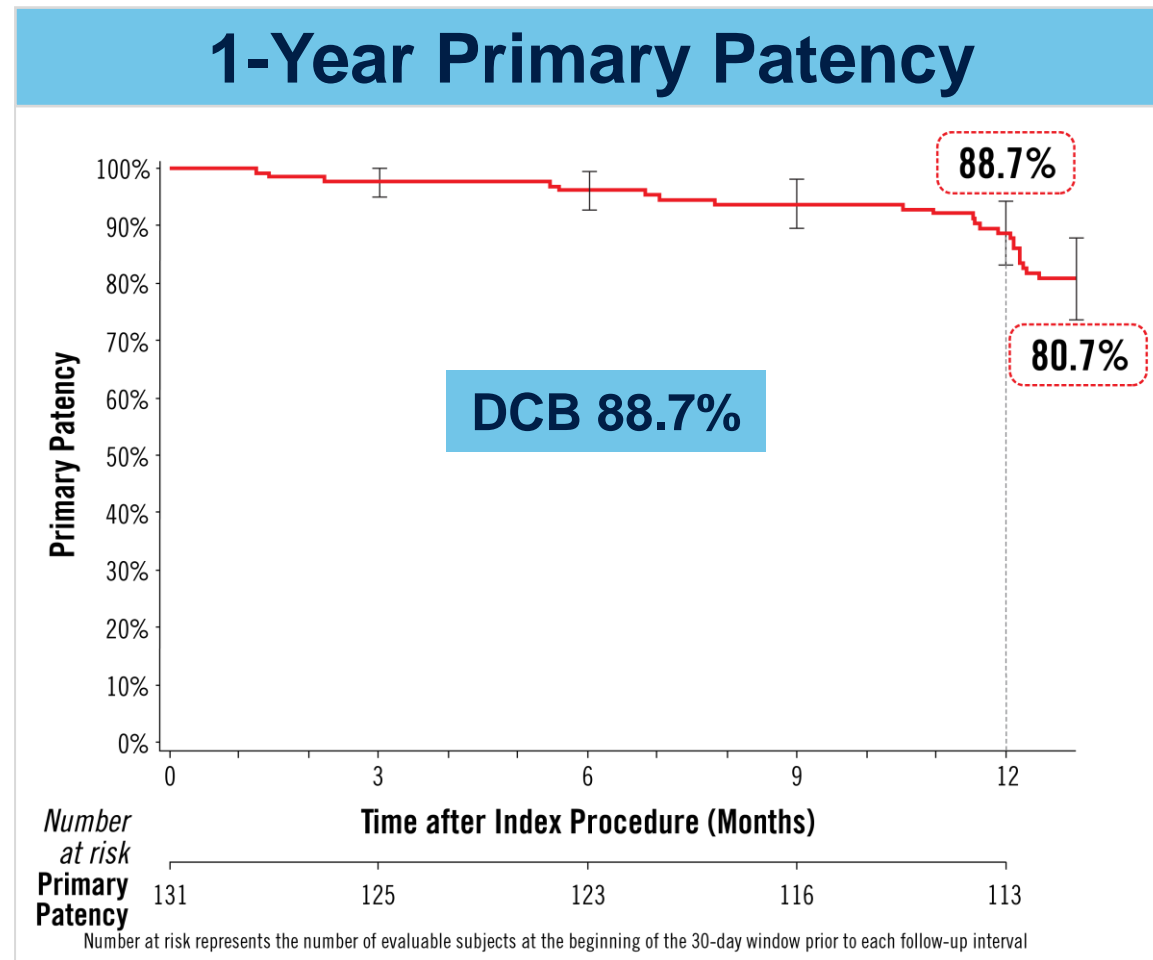
Baseline Characteristics	DCB (N=131 Subjects)
Age (Y)	67.8 ± 10.1
Diabetes (%)	35.1% (46/131)
Hypertension (%)	81.5% (106/130)
Hyperlipidemia (%)	72.1% (93/129)
Current Smoker (%)	35.9% (47/131)
Previous Peripheral Revasc. (%)	100.0% (131/131)
Concomitant BTK Disease (%)	43.3% (55/127)

Lesion Characteristics	DCB (N=149 Lesions)
Lesion type:	
De Novo	0.0% (0/149)
Non-stented Restenotic	0.0% (0/149)
In-Stent Restenosis	100.0% (149/149)
Lesion Length (cm)	17.17 ± 10.47
Total Occlusions (%)	34.0% (48/141)
Calcification (%)	59.1% (78/132)
Severe Calcification (%)	8.3% (11/132)

1. Brodmann et al. *JACC Cardiovasc Interv.* 2017;10:2113-2123

# IN.PACT Global ISR Imaging Cohort<sup>1</sup>

## Effectiveness and Safety Outcomes



1-Year Outcomes	DCB (N=124 Subjects)*
Clinically-Driven TLR**	7.3% (9/124)
Primary Safety Endpoint†	92.7% (115/124)
Major Adverse Events‡	8.9% (11/124)
Death (all-cause)	0.0% (0/124)
Major Target Limb Amputation	0.0% (0/124)
Thrombosis	0.8% (1/124)
Any TLR	8.1% (10/124)
Any TVR	9.7% (12/124)

\* Six subjects did not complete the study through the follow-up period

\*\* Clinically Driven TLR: Any re-intervention within the target lesion(s) due to symptoms or drop of ABI of  $\geq 20\%$  or  $> 0.15$  when compared to post-index procedure baseline ABI

† Primary Safety Endpoint: Composite of 30-day freedom from device- and procedure-related mortality and 12-month freedom from major target limb amputation and clinically-driven TVR

‡ Major Adverse Events: Composite of death, major target limb amputation, clinically-driven TVR, and thrombosis

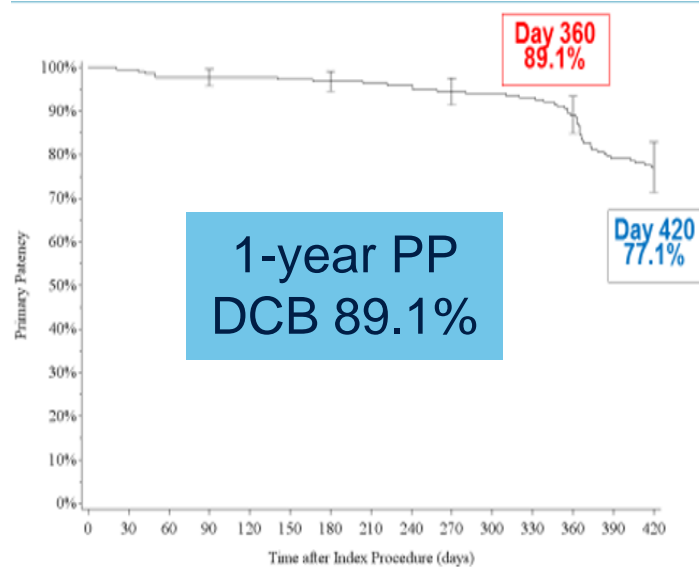
1. Brodmann et al. *JACC Cardiovasc Interv.* 2017;10:2113-2123

# Long Lesions



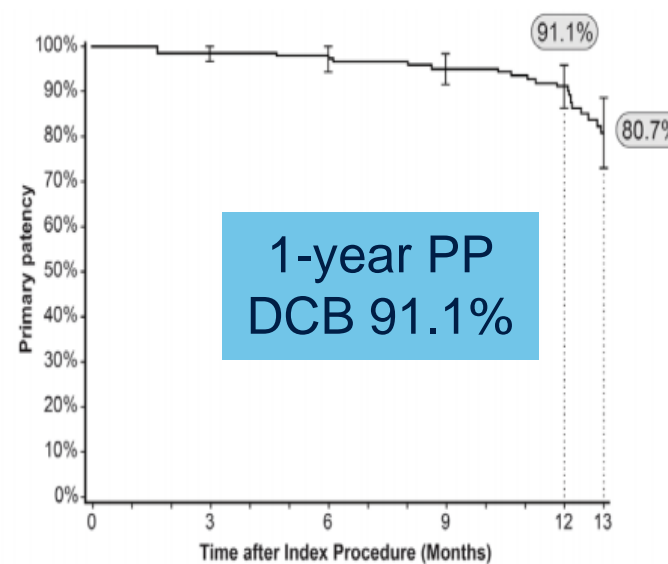
# DCB for Long Lesions (LL) Primary Patency

## IN.PACT Global Complex Long Lesions<sup>1</sup>



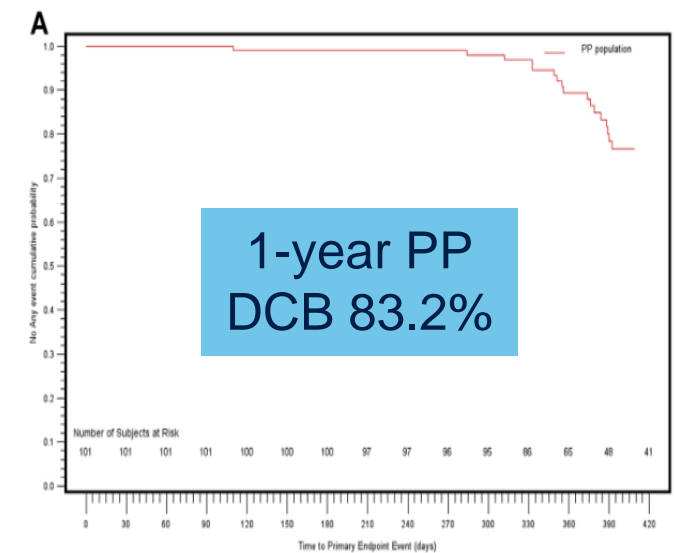
Mean age = 69 y  
Diabetes = 38.7%  
LL = 28.7 ± 7.1 cm  
CTO = 70.1%  
ISR = 20.3%  
Severe calc = 13.7%

## IN.PACT Global Long Lesions<sup>2</sup>



Mean age = 70 y  
Diabetes = 41.0%  
LL = 26.4 ± 8.6 cm  
CTO = 60.4%  
ISR = 0.0%  
Severe calc = 19.6%  
Prov. Stent = 39.4%

## SFA-Long<sup>3</sup>

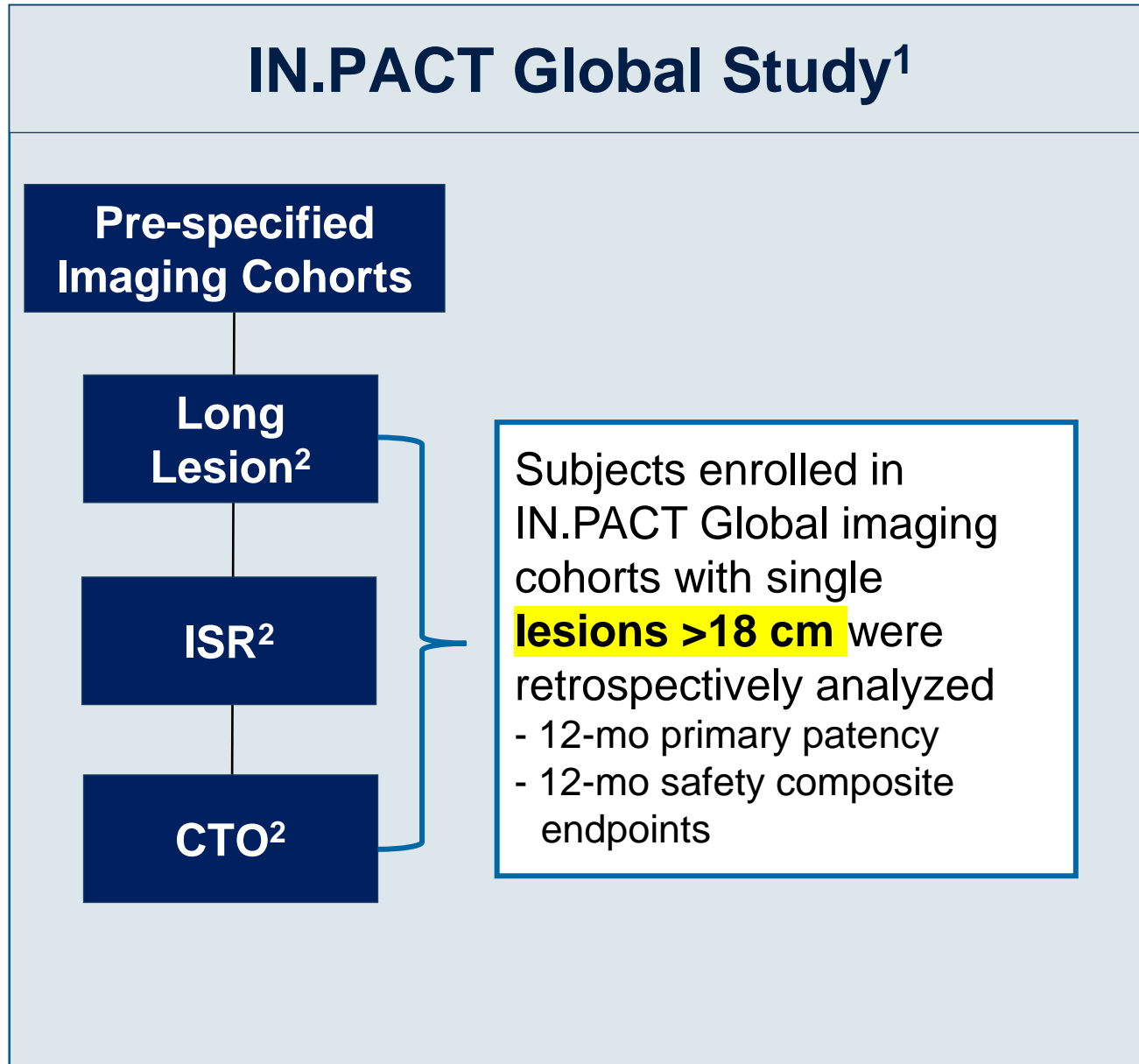


Mean age = 68 y  
Diabetes = 57.2%  
LL = 25.1 ± 7.9 cm  
CTO = 49.5%  
ISR = NA  
Severe calc = 13.3%  
Prov. Stent = 10.5%

1. IN.PACT Admiral paclitaxel-coated PTA balloon catheter instructions for use. M052624T001\_Rev1G  
2. D. Scheinert et al. *Circ Cardiovasc Interv.* 2018 Oct;11(10):e005654.

3. A. Micari et al. *JACC Cardiovasc Interv.* 2016 May 9;9(9):950-6

# IN.PACT Global Complex Long Lesion Imaging Cohort



Baseline Characteristics	DCB (N = 227 subjects)
Age, ± SD	68.8 ± 9.7
Male Gender	67.4% (153/227)
Diabetes	38.7% (87/225)
Current Smoker	42.7% (97/227)
Hypertension	86.7% (197/227)
Hyperlipidemia	71.7% (157/219)
Lesion Characteristics	DCB (N = 227 subjects and lesions)
Lesion (N)	
De novo	67.0% (152/227)
Restenotic (non-stent)	12.8% (29/227)
<b>In-stent restenotic</b>	<b>20.3% (46/227)</b>
<b>Lesion Length, ± SD, cm</b>	<b>28.74 ± 7.11</b>
<b>Total Occlusions</b>	<b>70.1% (157/224)</b>
Diameter Stenosis, ± SD, mm	94.1% ± 10.7
Calcification (%) <sup>3</sup>	
None	26.9% (59/219)
Mild	37.4% (82/219)
Moderate	11.9% (26/219)
Moderately Severe	10.0% (22/219)
Severe	13.7% (30/219)

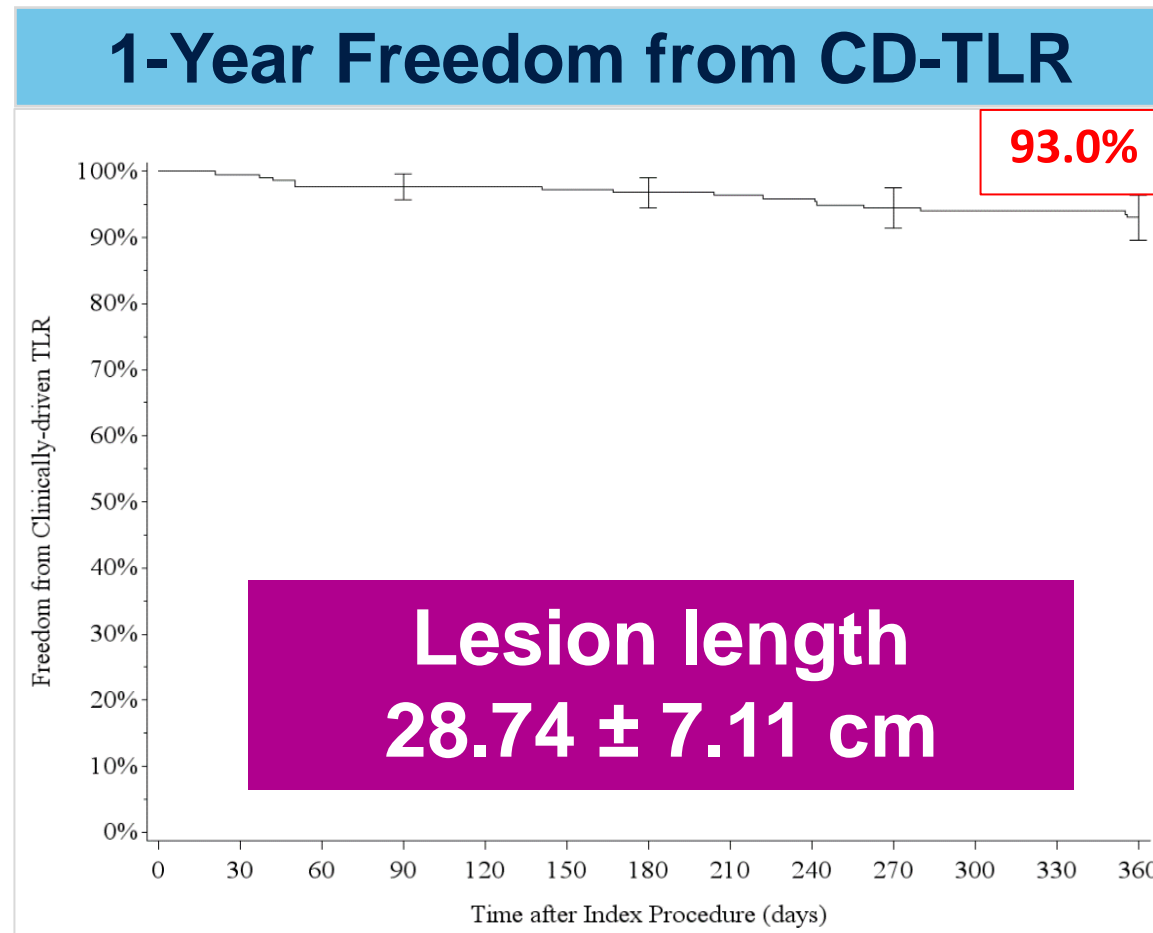
1. Core lab-adjudicated with clinical events committee oversight

2. Clinical events committee oversight

3. Dattilo R, et al. *J Invasive Cardiol.* 2014;26:355-360. Severe calcium definition used by study sites and core laboratory as bilateral calcium at the same location (also measured in sections), ≥ half of the total lesion length, ≥180° (both sides of the vessel at the same location)

# IN.PACT Global Complex Long Lesion Imaging Cohort

## Effectiveness and Safety Outcomes



1-Year Outcomes	DCB (N = 227)
<b>Primary Safety Composite*</b>	92.9% (195/210)
<b>Major Adverse Events†</b>	10.5% (22/210)
<b>All-cause Death</b>	2.4% (5/210)
<b>CD-TLR‡</b>	7.1% (15/210)
<b>All TLR</b>	7.1% (15/210)
<b>CD-TVR</b>	7.1% (15/210)
<b>Major Target Limb Amputation</b>	0.0% (0/210)
<b>Thrombosis</b>	3.3% (7/210)

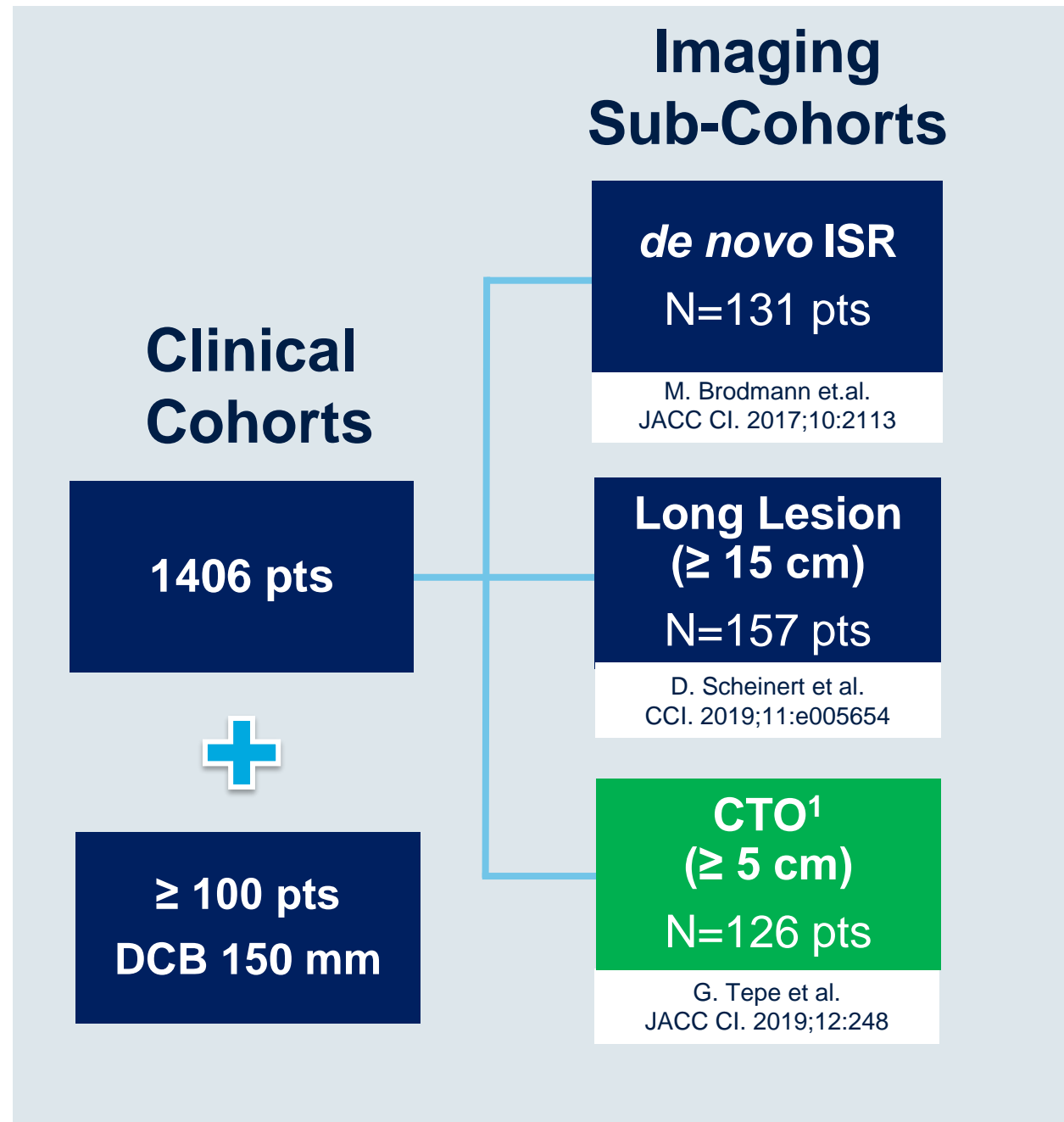
\* Safety Composite Endpoint consists of: freedom from device/procedure related death to 30 days; freedom from target limb amputation within 12 months; and freedom from clinically-driven TVR within 12 months.

† Composite of death, clinically-driven TVR, target limb major amputation, and thrombosis.

‡ Clinically-driven TLR adjudicated by an independent Clinical Events Committee, blinded to the assigned treatment based on any re-intervention at the target lesion due to symptoms or drop of ABI of  $\geq 20\%$  or  $>0.15$  when compared to post-procedure baseline ABI.

# CTOs

# IN.PACT Global CTO Imaging Cohort



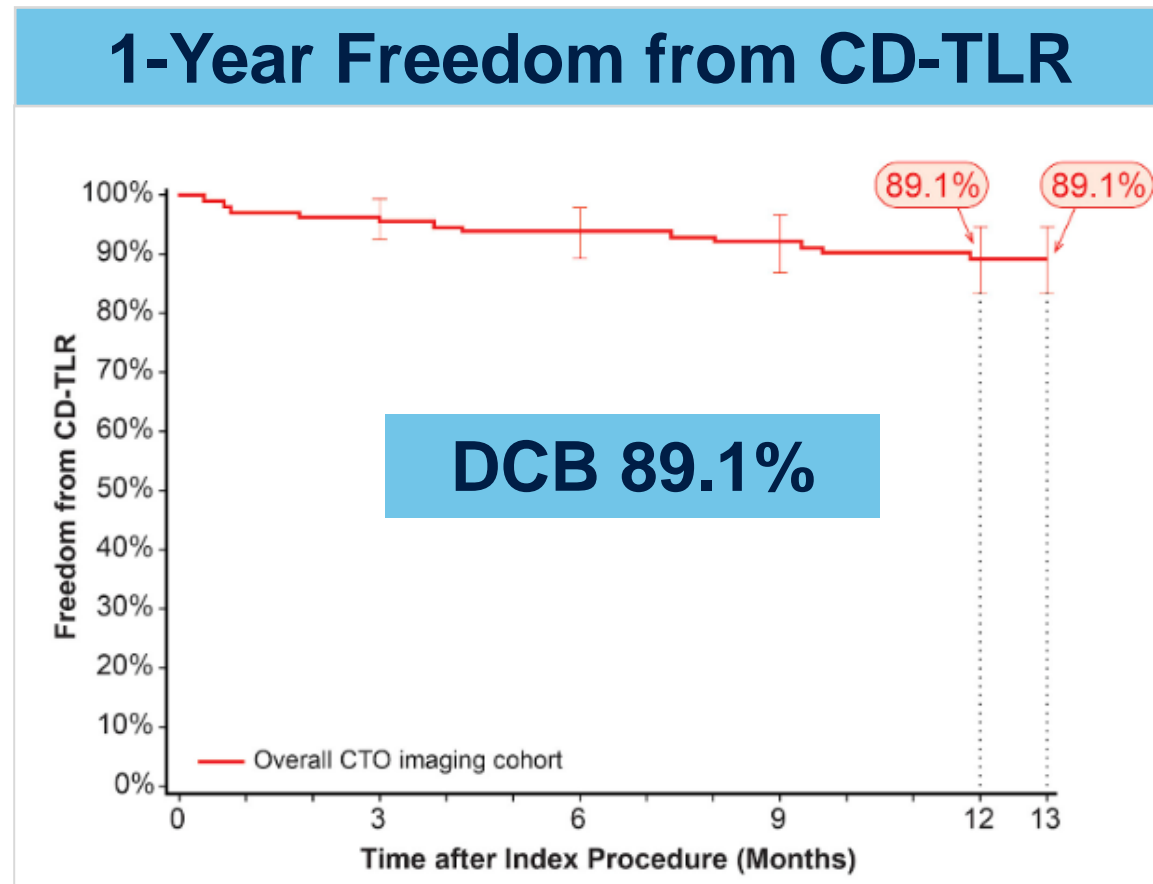
Baseline Characteristics	DCB (N=126 Subjects)
Age, Y	67.5 ± 10.4
Male, %	69.0% (87/126)
Diabetes, %	29.6% (37/125)
Hypertension, %	82.3% (102/124)
Hyperlipidemia, %	64.5% (78/121)
Current Smoker, %	49.2% (62/126)
Previous Peripheral Revasc., %	33.3% (42/126)
Concomitant BTK Disease, %	41.0% (48/117)

Lesion Characteristics	N = 127 Lesions
<b>Lesion Type: % (n/N)</b>	
De novo	92.1% (117/127)
Restenotic (non-stented)	7.9% (10/127)
In-stent Restenosis	0.0% (0/128)
Lesion Length, cm	22.83 ± 9.76 cm
Total Occlusions, %	100% (127/127)
Calcification, %	71.0% (88/124)
Severe Calcification, %	3.2% (4/124)

1. Tepe et al. *JACC Cardiovasc Interv.* 2019 Mar 11;12(5):484-493

# IN.PACT Global CTO Imaging Cohort<sup>1</sup>

## Effectiveness and Safety Outcomes



1-Year Outcomes	DCB (N=126 subjects)
<b>Clinically-Driven TLR*</b>	11.3% (13/115)
<b>Clinically-Driven TVR†</b>	11.3% (13/115)
<b>Primary Safety Endpoint‡</b>	88.7% (102/115)
<b>Major Adverse Events§</b>	15.7% (18/115)
<b>Death (all-cause)</b>	4.3% (5/115)
<b>Major Target Limb Amputation</b>	0.0% (0/115)
<b>Thrombosis</b>	4.3% (5/115)

Provisional stenting = 46.5%

\* Any re-intervention within the target lesion(s) due to symptoms or drop of ABI of  $\geq 20\%$  or  $> 0.15$  when compared to post-index procedure baseline ABI.

† Any re-intervention within the target vessel due to symptoms or drop of ABI  $\geq 20\%$  or  $> 0.15$  when compared to post-index procedure baseline ABI.

‡ Composite of 30-day freedom from device- and procedure-related mortality and 12-month freedom from major target limb amputation and clinically-driven TVR.

§Major Adverse Events: Composite of death, major target limb amputation, clinically-driven TVR, and thrombosis.

1. Tepe et al. *JACC Cardiovasc Interv.* 2019 Mar 11;12(5):484-493

# Summary

- DCBs perform consistently well in patients at risk for restenosis and progression of PAD
- The observed clinical benefit supports the use of the IN.PACT Admiral DCB in PAD patients with ISR, long lesions, and CTOs
- Longer term studies with larger patient cohorts will further clarify treatment options for high risk categories