

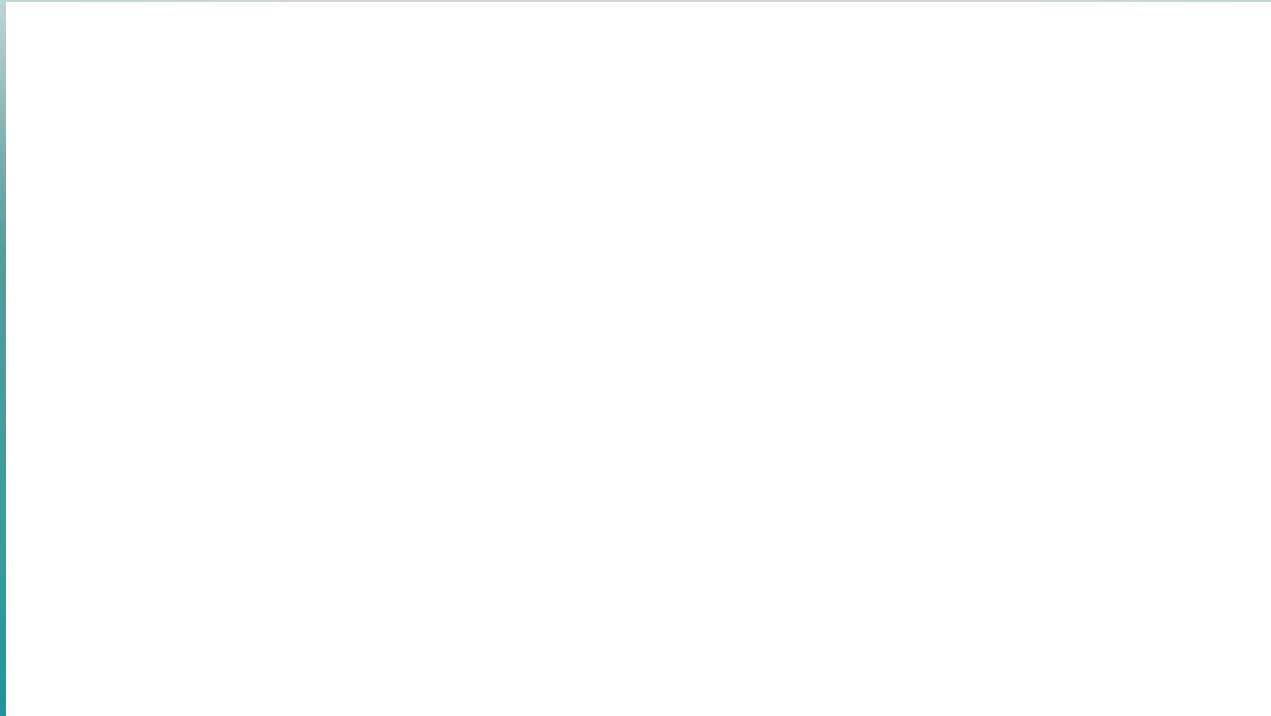


SIPROTEC

SISTEMA INTEGRAL DE
PROVISIÓN DE PRÓTESIS

**XXIII Congreso Nacional CACI
24 de noviembre 2023.**

Lic. Palacios Francisco



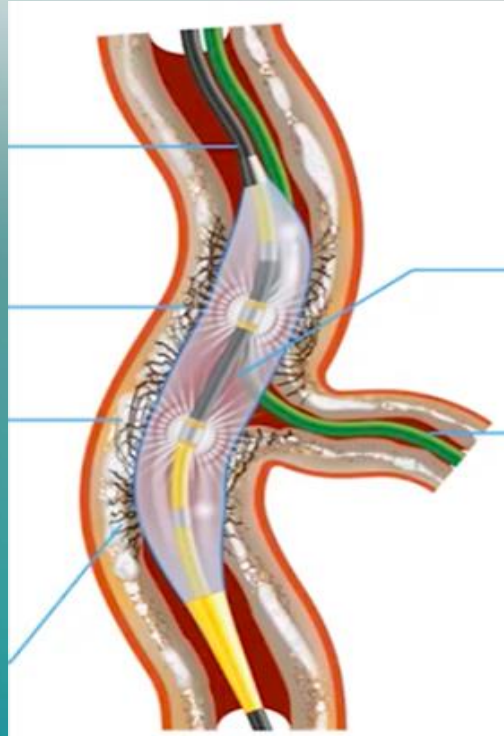


Compatible con
guía 0,014"

Terapia
"selectiva"

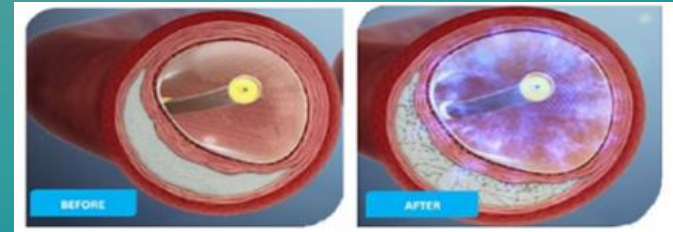
Atraviesa el
tejido para llegar
al calcio medial

El calcio fracturado
permanece dentro de
la pared del vaso, lo
que disminuye el
riesgo de embolización



El balón se infla a bajas
atm, lo que minimiza el
riesgo de daño arterial
debido a las altas
presiones

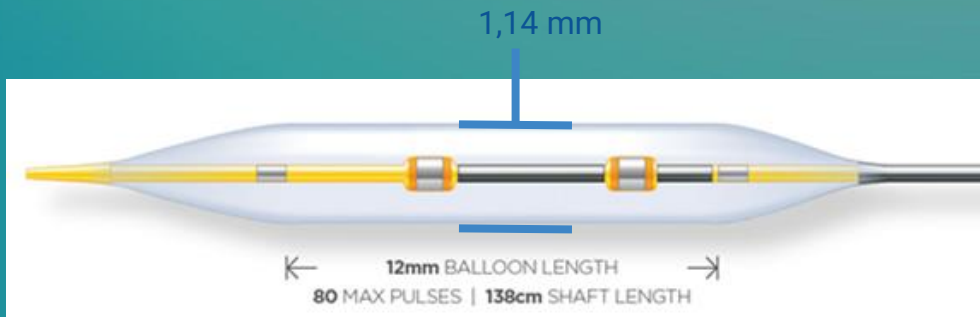
Permite colocar
un guía de
protección para
el vaso lateral





SHOCKWAVE | C²

Diameter (mm)	Length (mm)	Max Pulse Count	Guidewire Compatibility (in)	Guide Catheter Compatibility	Working Length (cm)	Crossing Profile Range* (In)
2.5	12	80	0.014"	6F	138	0.044 ± 0.002
3.0						
3.5						
4.0						





CAD III.... Resultados

30 días

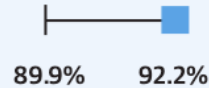
Primary Safety Endpoint

30-day Freedom from MACE
92.2% (353/383)

Lower 1-sided 95% CI
89.9%

p value
< 0.0001

Safety Performance Goal
= 84.4%



Freedom From 30-Day MACE (%)

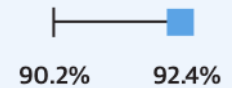
Primary Effectiveness Endpoint

Procedural Success
92.4% (355/384)

Lower 1-sided 95% CI
90.2%

p value
< 0.0001

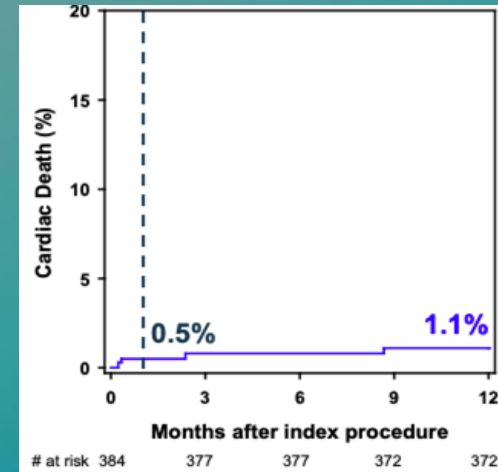
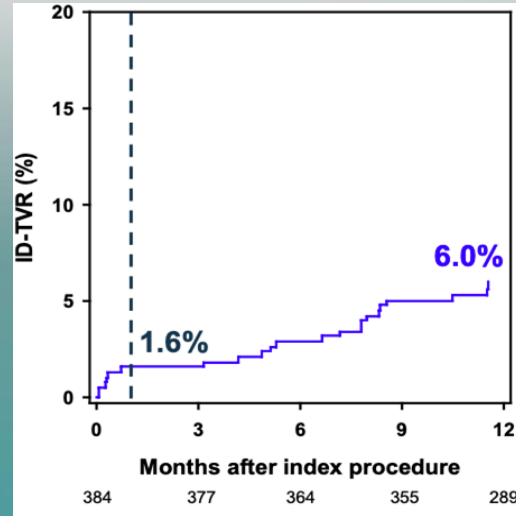
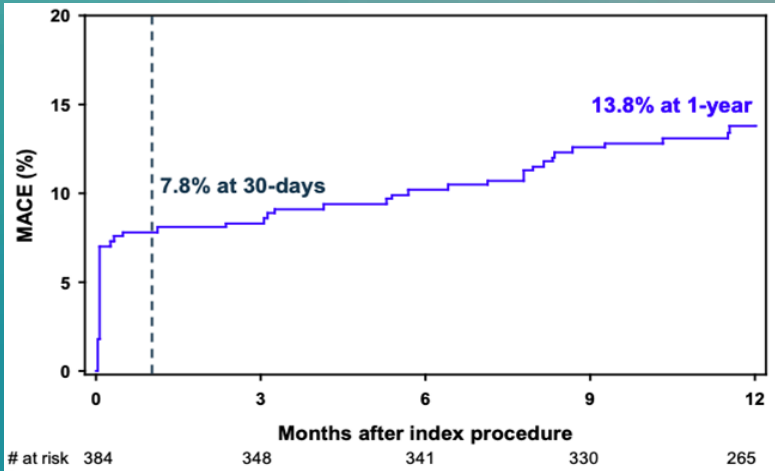
Effectiveness Performance Goal
= 83.4%



Procedural Success (%)

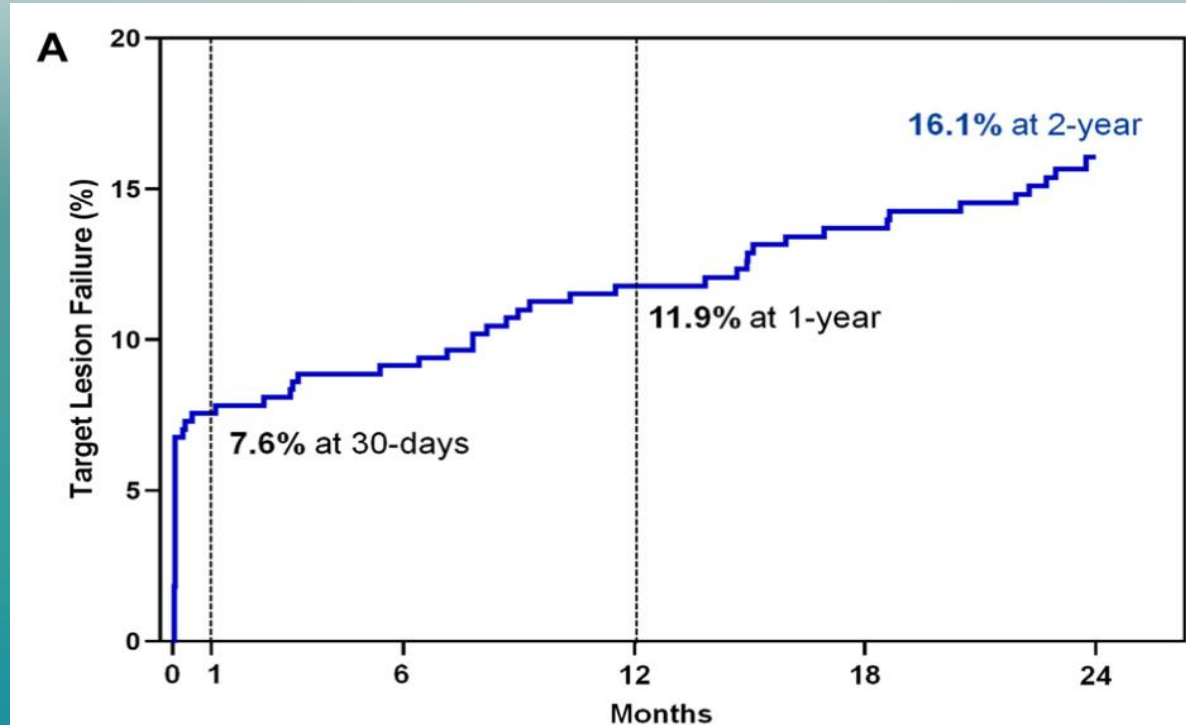


1 año



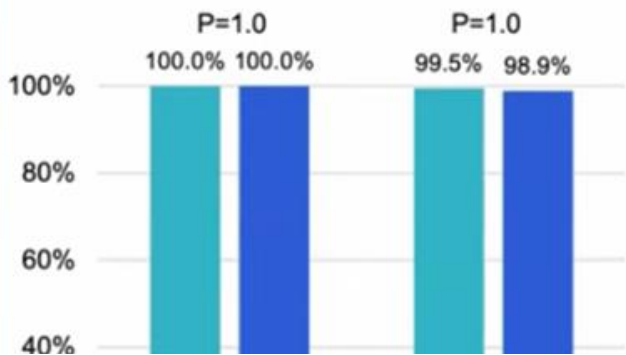


2 años



Final In-stent Diameter Stenosis

■ < 25mm ■ ≥ 25mm



XXIII CONGRESO

CAD III: Long Lesion

Study Design

multicenter,
global IDE
595176



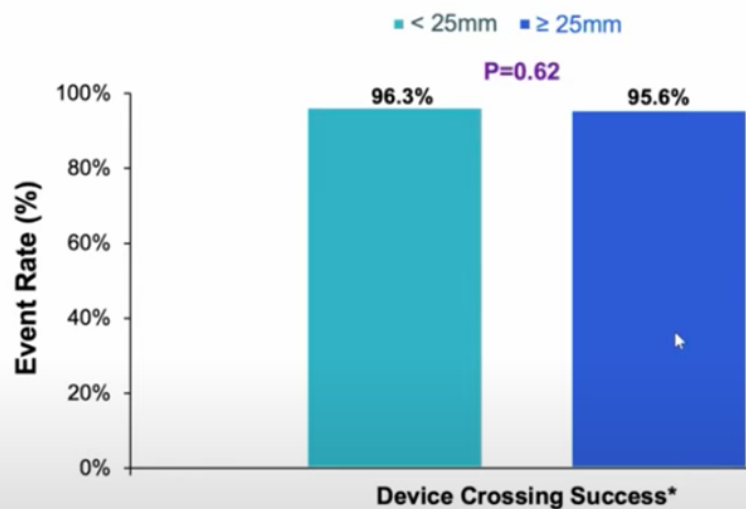
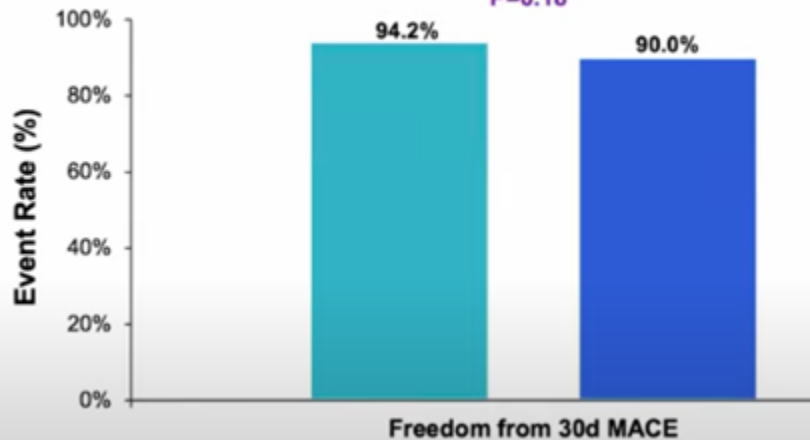
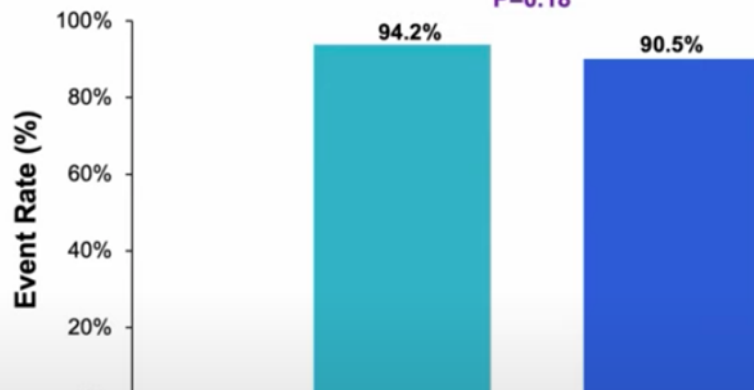
Heavily calcified
RVD 2.5-4.0 mm, ster
One roll-in |
4'

IT

Stratified

< 25mm

30-da





	C2	C2+
Longitud	12 mm	12 mm
Pulsos	80	120
Ciclos	8	12
Longitud de tratamiento	42 mm	62 mm
Cateter Guia Compatible	6 Fr	5 Fr
Funda Esteril	No	Si





SHOCKWAVE M⁵⁺

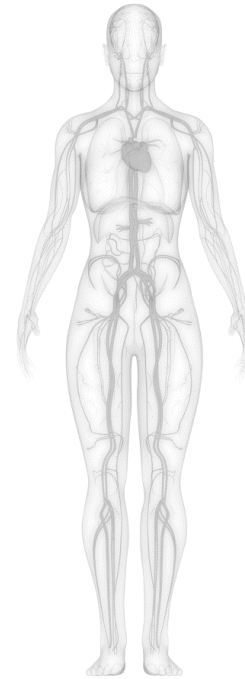


- + FASTER**
Increase procedural efficiency with 50% quicker cycle time
- + FURTHER**
Broaden access options with an increased catheter working length of 135cm
- + LARGER**
Optimally treat larger diameter vessels with new 8.0mm size



LONGITUD

Shaft de trabajo 135 cm





SHOCKWAVE | M⁵⁺

CYCLE TIME: 15 SECONDS

2 pulsos/second



300 $\frac{3-5\text{g}}{\times 60}$

SHOCKWAVE | M⁵

CYCLE TIME: 30 SECONDS

1 pulse/second



300 $\frac{4-5\text{g}}{\times 60}$



TAMAÑO

Nuevo tamaño de 8 mm de diámetro

Balloon Diameter (mm)	Balloon Length (mm)	Sheath Compatibility	Catheter Working Length	Pulses/Cycle	Cycles	Pulses (Max)	Balloon Crossing Profile (in)
3.5	60	6F	135	30	10	300	.054
4.0	60	6F	135	30	10	300	.054
4.5	60	6F	135	30	10	300	.057
5.0	60	6F	135	30	10	300	.061
5.5	60	6F	135	30	10	300	.062
6.0	60	6F	135	30	10	300	.065
6.5	60	6F*	135	30	10	300	.066
7.0	60	6F*	135	30	10	300	.068
8.0	60	7F	135	30	10	300	.074

SHOCKWAVE | M⁵⁺

Característica	M5	M5+
Longitud	110 cm	135 cm
Pulsos	300	300
Velocidad	1 pulso/seg	2 pulsos/seg
Tamaños	3.5-7 mm	3.5-8 mm





PAD III

↓ 40%

Lower pressure to achieve better results with IVL

↓ 75%

Reduction in provisional stent placement risk with IVL

↓ 69%

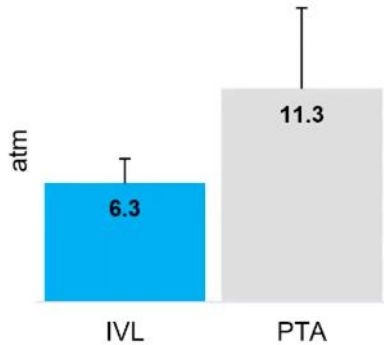
Reduction in need for post-dilatation with IVL

↓ 77%

Reduction in Type \geq C Dissection with IVL

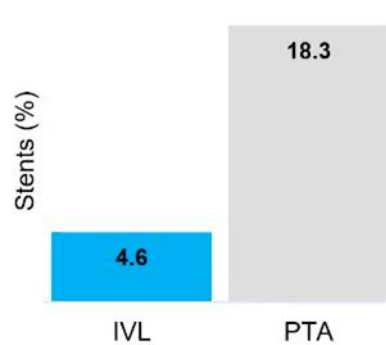
Max Inflation Pressure

$P < 0.0001$



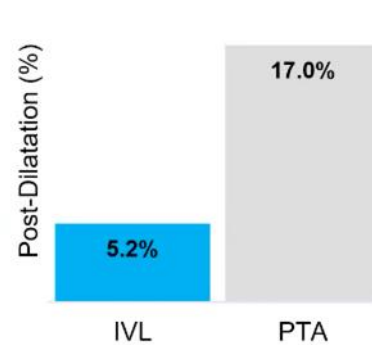
Stent Placement

$p = 0.0002$



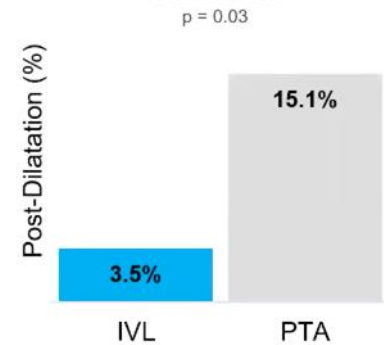
Post-Dilatation

$p = 0.001$



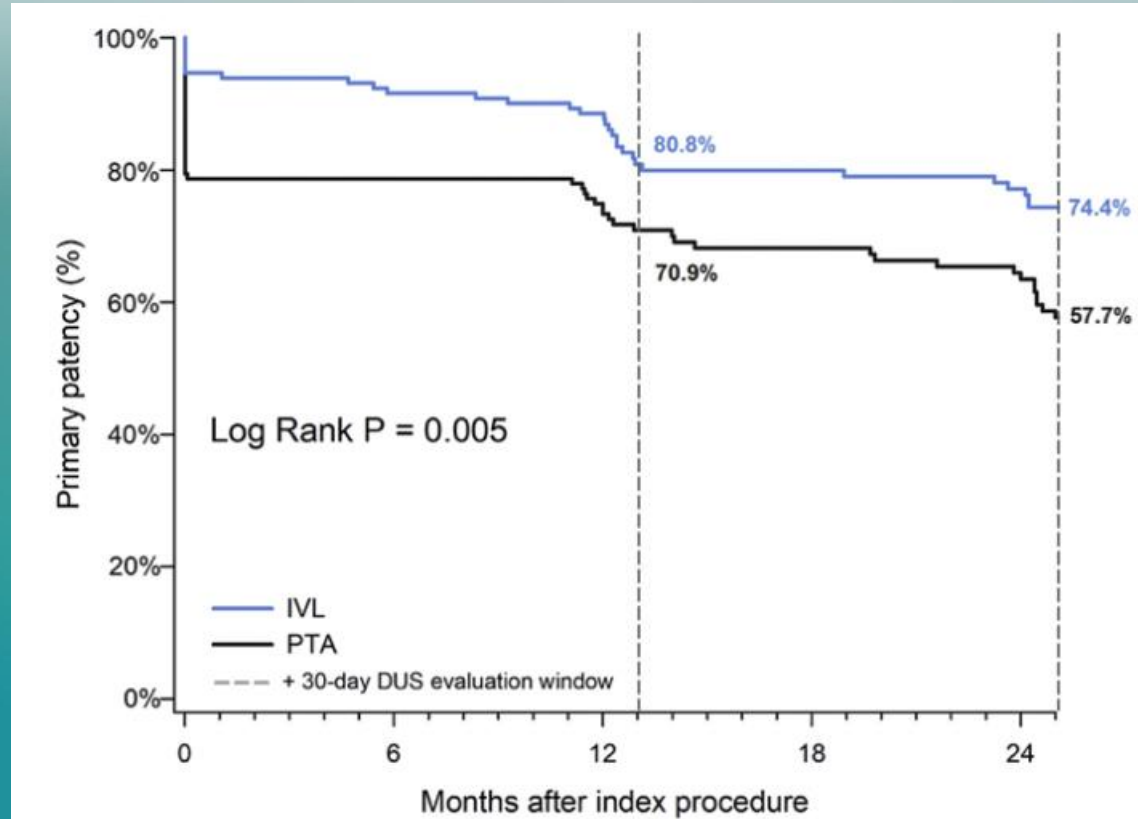
Grade C or Higher Dissection

$p = 0.03$





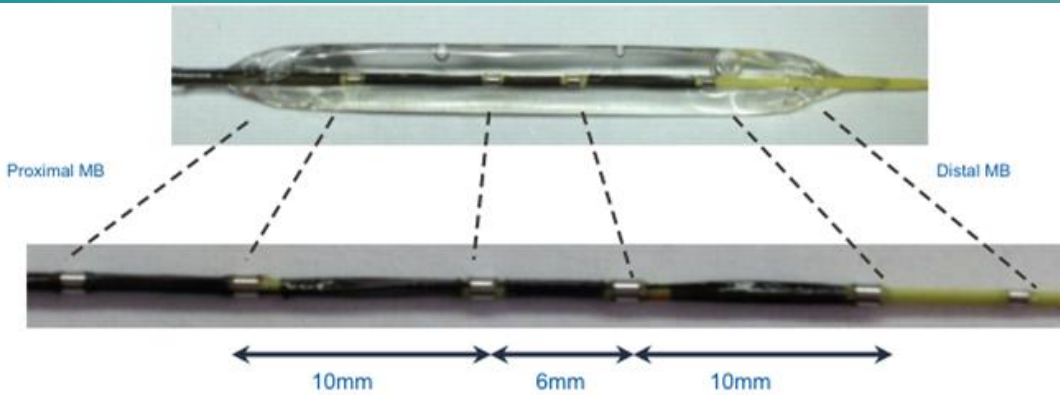
1 y 2 años





S4

DIAMETER (mm)	LENGTH (mm)	GUIDEWIRE COMPAT. (in)	SHEATH COMPATIBILITY (in)	WORKING LENGTH (cm)	CROSSING PROFILE RANGE (in)	PULSES/CYCLE	PULSES (max)
2.5	40	0.014	5Fr	135	.048	20	160
3.0	40	0.014	5Fr	135	.048	20	160
3.5	40	0.014	5Fr	135	.048	20	160
4.0	40	0.014	5Fr	135	.050	20	160



DISRUPT BTK

By The Numbers

20

Patients from 3 sites

100%

Moderately/severely calcified lesions

75%

Rutherford Category V

Compelling Safety & Performance

in Severely Calcified Lesions*

95%

Procedural Success

0%

Perforations, Embolization,
Slow/No Reflow, Abrupt
Closure

26%

Final residual Stenosis with
an acute gain of 1.5mm

0%

Major adverse event at 30
days

100%

Freedom From CD TLR at 30
days



PAD III OS Sub-study:

IVL treatment of calcified infrapopliteal arteries

Heavily calcified *de novo* infrapopliteal lesions

IVL +/- adjunctive therapy*

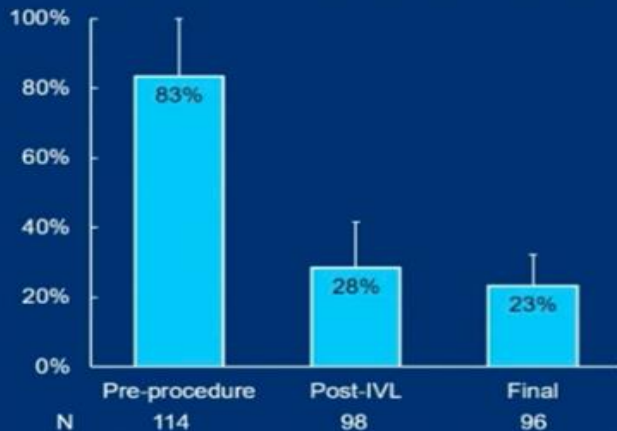
July 2018 – Aug 2020

N = 101 patients; 114 BTK lesions; 15 global sites



Sub-study objective: Assess 'real world' peri-procedural outcomes of S⁴ IVL treatment of calcified BTK lesions†

Diameter Stenosis*



Complications	Post-IVL N=98	Final N=96
Dissections D-F	3.1%†	0%
Perforation	0%	0%
Distal Emboli	1.0%	0%
Slow Flow/ No Reflow	0%	0%
Abrupt Closure	0%	0%



Ongoing....

**DISRUPT
BTKO1**



250

Patients



40

Global sites



Lesion lengths
up to **200mm**



Outcomes out to **2
Years**

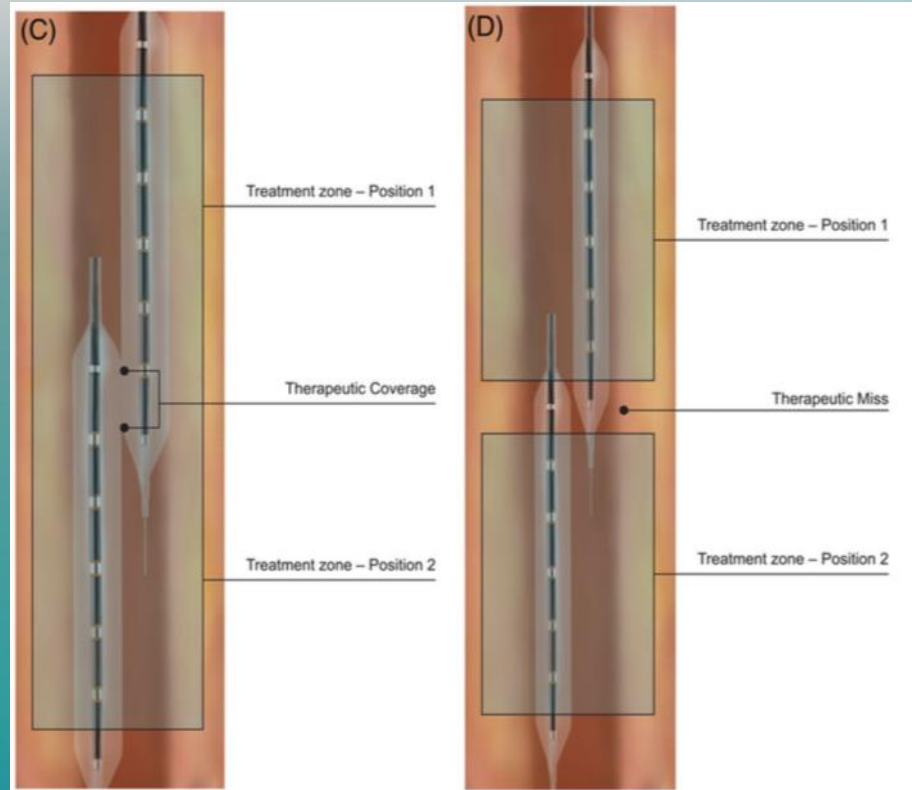


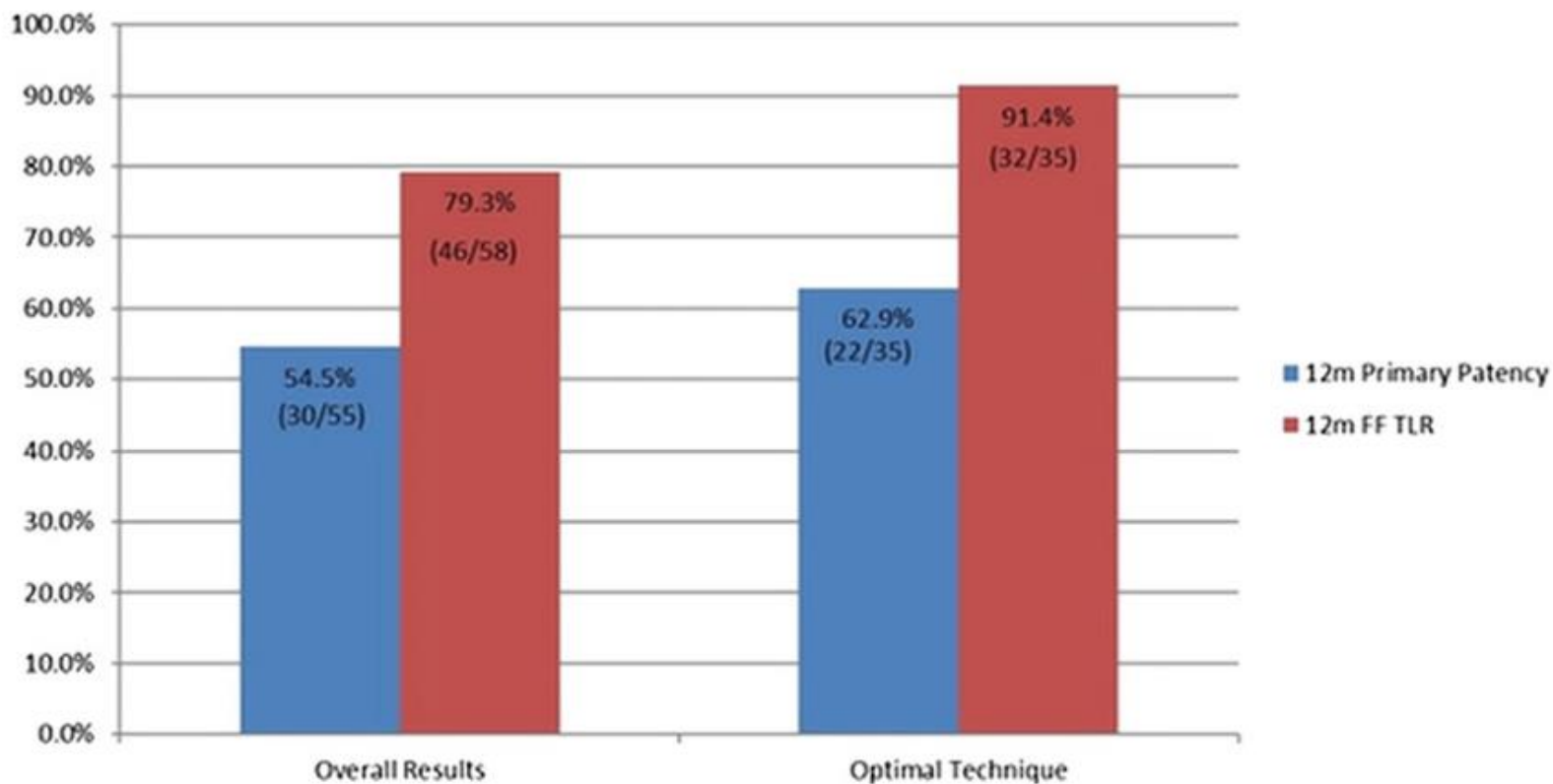
TÉCNICA ÓPTIMA

Optimal **Undersized**



Enlarge Device 10%
vs. RVD to Facilitate Energy Transfer







C2+
Coronario
120 pulsos
5 Fr
Rapid Exchange

M5+
Periférico Suprapatelar
300 pulsos
6 Fr/ 7 Fr
Over The Wire

S4
Periférico Infrapatelar
160 pulsos
5 Fr
Over The Wire



Take home message

- Shockwave es eficaz, seguro un tiene una curva de aprendizaje corta.
- Modifica el calcio profundo, reduciendo las probabilidades de recoil elástico temprano.
- Debido a su mecanismo de acción disminuye las probabilidades de no-reflow.
- IVL fue superior a la PTA en el éxito del procedimiento agudo y demostró un tratamiento atraumático:
 - Reducción en % de la estenosis del diámetro antes de la colocación del soporte de DCB
 - Baja presión máxima de inflado
 - Reducción de la frecuencia y gravedad de las disecciones
 - Tasa de dilatación e implantación de stent inferior
 - El FUP a 1 y 2 años mostraron superioridad en la permeabilidad de los vasos tratados.



¡MUCHAS GRACIAS!

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