Jornadas SOLACI
Montevideo, URUGUAY

SOLACI

SOCIEDAD URUGUAYA DE CARDIOLOGÍA

CardioSUC 2025
41° Congreso Uruguayo de Cardiología
El paciente en el corazón de cada decisión

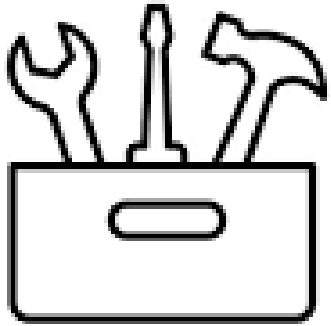
CTO
Caja de herramientas

¿Con qué materiales debo contar en un programa de oclusión crónica total?

Dr. Juan Ignacio Mayol

Previo al cruce de la lesión

Catéteres
Extensor de catéteres



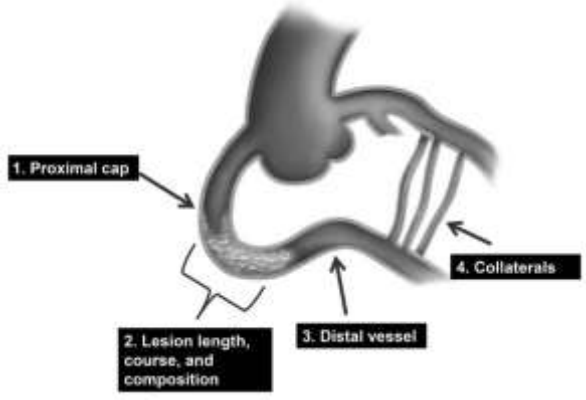
Luego del cruce

Lazo (externalización guía)
Balones
Dispositivos de modificación del calcio
Stents

Para cruzar la lesión

Guías coronarias
- Workhorse
- Poliméricas
- Open Coil
- Externalización

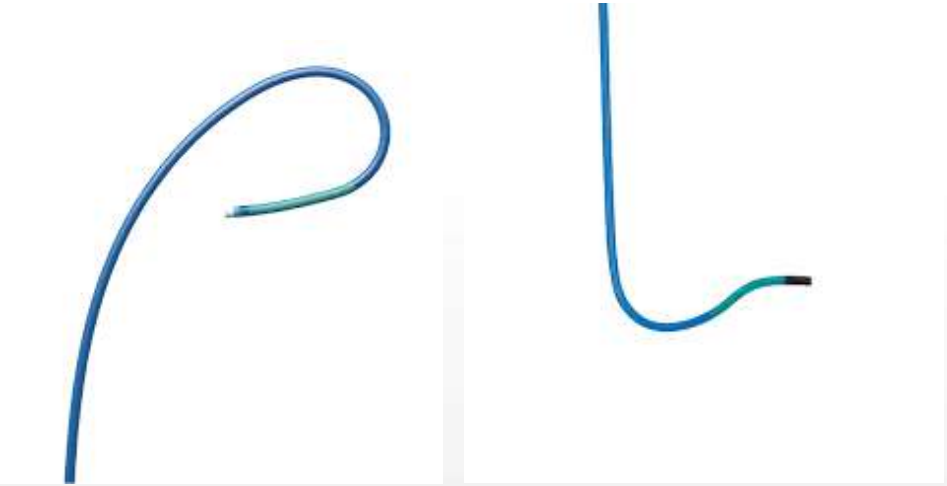
Microcatéteres
Stingray
Crossboss
Imagen intracoronaria



Manejo de complicaciones

Kit pericardiocentesis
Coils
Sents forrados
Marcapasos transitorio
Ecocardiograma

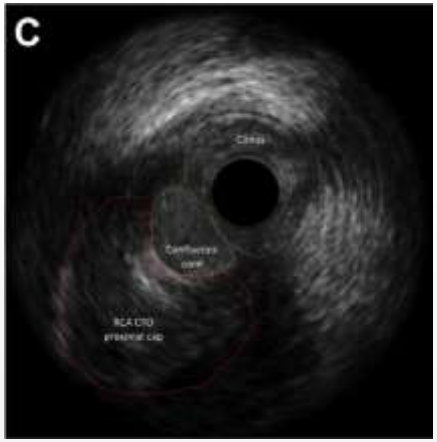
Previo al cruce: Catéteres + extensores

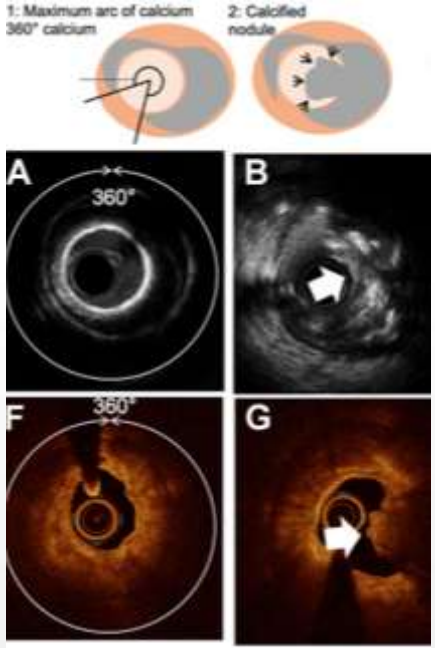


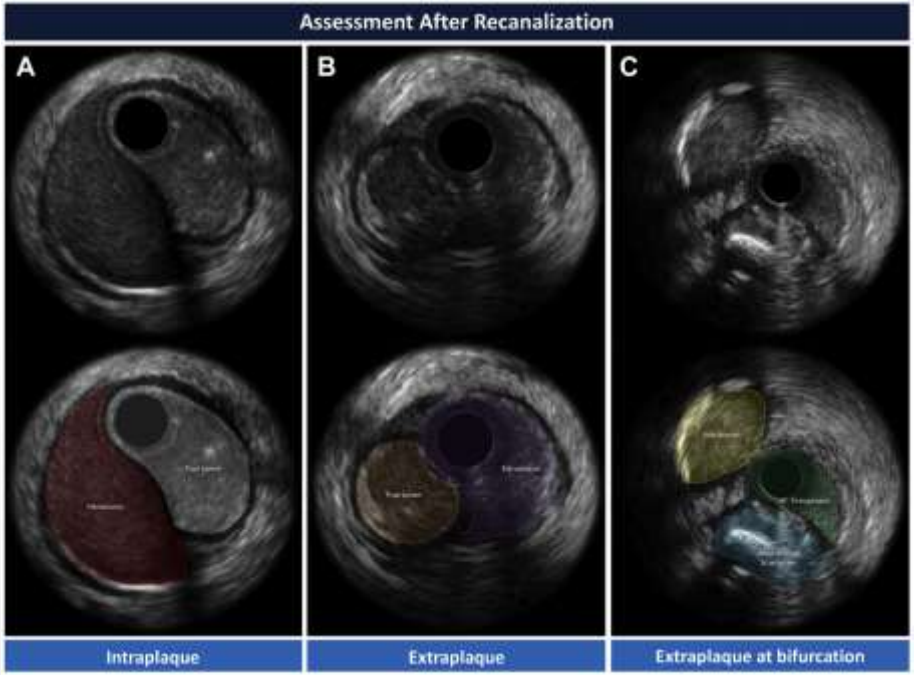
EBU – AL1

Guidezilla / GuideLiner

Imagen intracoronaria







Darmoch F, et al. J Am Heart Assoc. 2020;9:e013678. Azzalini et al. JACC. 10. 2022:1-21

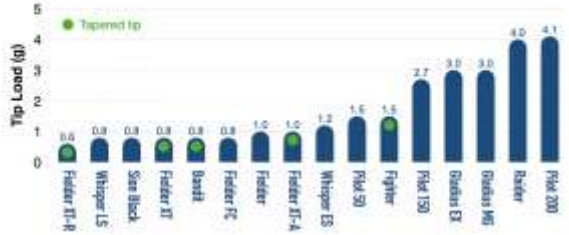
Para el cruce: Guías coronarias

¿Cómo elijo mis guías?

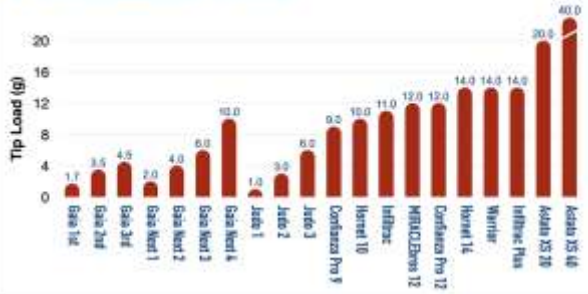
- Distal TIP
  Peso/Forma
- Coating
  Hidrofóbicas
  Hidrofílicas
  Poliméricas
- Core
  Composición
  Grosor

Poder de penetración= Tip load/Tip Area (g/m2)

Polymer-jacketed wires



Penetration wires



WORKHORSE
SION blue
SION
SAMURAI
SAMURAI RC
Hi-torque BMW II
RUNTHROUGH NS Floppy
MINAMO
MARVEL

1

SUPPORTIVE
SION blue ES
Grand Slam
Hi-torque Extra Support
Hi-torque IRON MAN
Mailman
CHOICE Extra Support

POLYMER JACKETED
Tapered tip
Fielder XT-A
Fielder XT-R
FIGHTER
BANDIT
Non-tapered tip, low tip load
SION Black
Fielder FC
Hi-torque Whisper LS, MS, ES
Pilot 50
CHOICE PT, PT Floppy
Non-tapered tip, intermediate tip load
Gladius EX
Gladius MG, MG ES
Pilot 150, 200
RAIDER

2

SPECIALTY
Gaia 1st, 2nd, 3rd
Gaia next 1, 2, 3, 4
Judo 1, 2, 3
MIRACLEbros 3, 4, [illegible], 12
Miracle NEO 3
ULTIMATEbros 3
SUOH 03

2

PENETRATION
CONFIANZA PRO 9, 12
Astato XS 20, 40
HORNET 10, 14
WARRIOR
Hi-torque INFILTRAC, PLUS

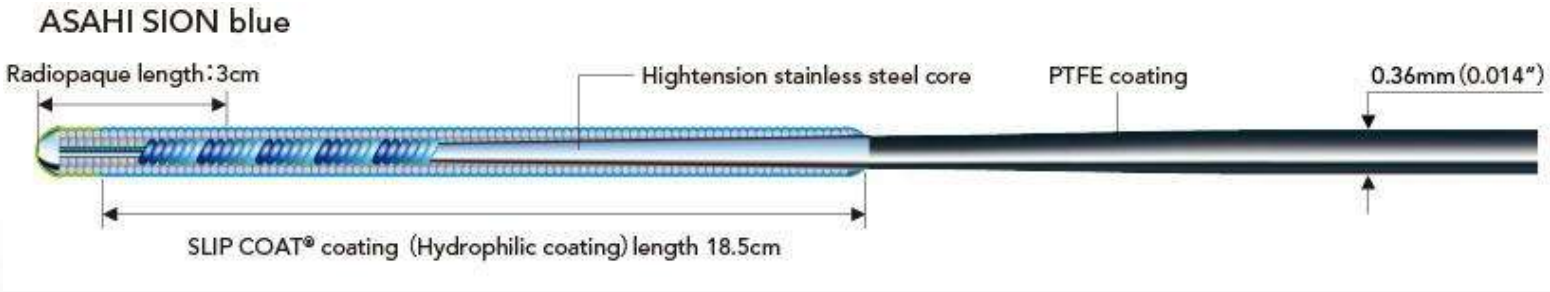
1

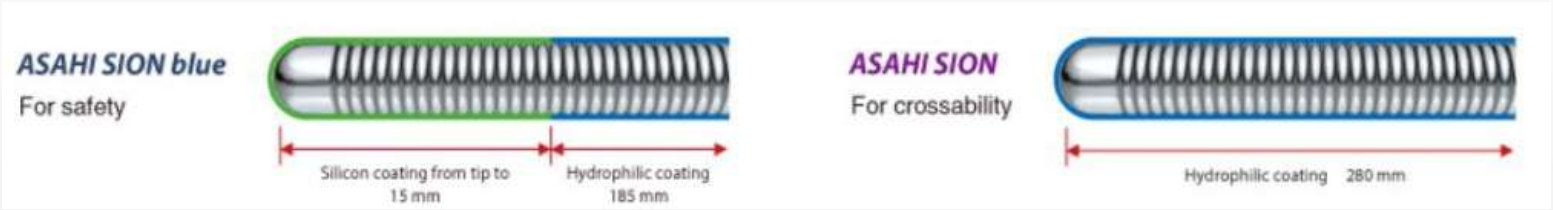
EXTERNALIZATION
RG3, R350

1

7

Workhorse



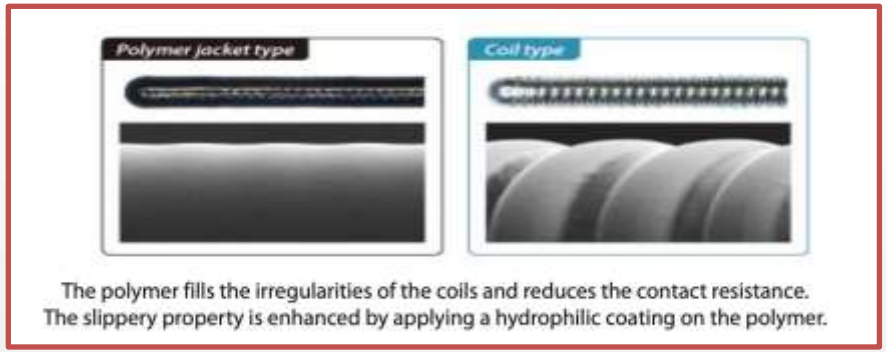


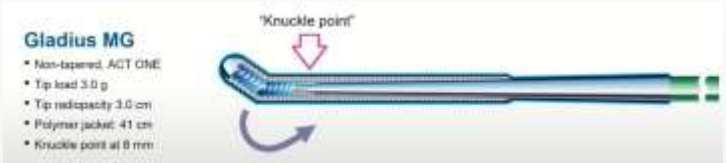
0,5gr con punta hidrofóbica

0,7gr

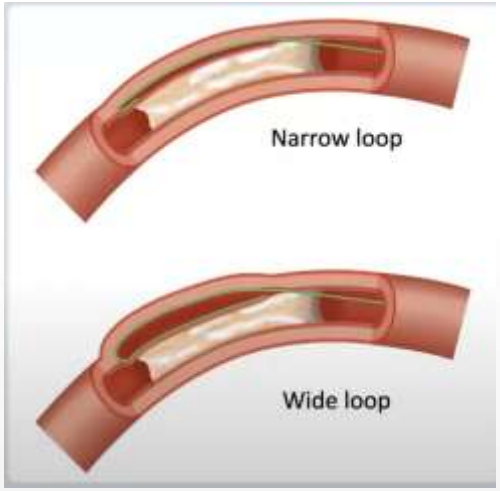
Poliméricas

Soft Non tapered	Soft Tapered (0,010-0,009	Rígidas
Whisper Sion Black	Fielder XTA1,0gr – XTR 0,06gr. Fighter 1,5 gr Bandit 0,8gr	Pilot 200 (4,1gr) Gladius MG (3gr).





Asahi Intecc. Source: http://www.asahi- intecc.co.jp/en/


Narrow loop
Wide loop


Wire exit
Safe negotiation ambiguity / tortuosity with knuckled wire
High Tip load non-polymeric wire
vs
High Tip load polymeric wire with knuckle
Trust the Knuckle!

Guías rigidez intermedia

ULTIMATEbros 3

ASAHI INTECC

- Tip load ..... 3.0 gf
- Tip radiopacity ..... 11 cm
- SLIP-COAT® coating over the spring coil until the middle of the shaft / without tip

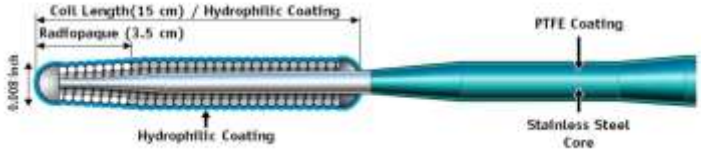
Long hydrophilic coating maintains high maneuverability, allowing for improved wire manipulation in heavy stenosed lesions.
Fine shaping improves vessel selectivity and reduces the risk of false lumen expansion.

ASAHI Gaia micro-cone tip

Conventional guide wire ball tip

SENTAI JUDO Family

BOSTON SCIENTIFIC



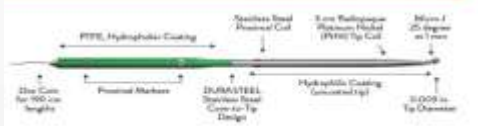
Gaia NEXT

Guías muy rígidas

CONFIANZA PRO/Conquest pro ASAHI INTECC

9-12gr

HI-TORQUE INFILTRAC
INFILTRAC PLUS ABBOTT

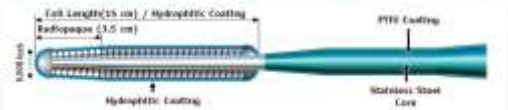


10-14gr

WARRIOR TELEFLEX

10-14gr

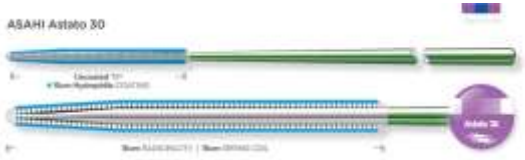
SENTAI HORNET Family BOSTON SCIENTIFIC



HI-TORQUE PROGRESS™ 140T Guide Wire
RESPONSEASE Parabolic Core Grind
CTO Indicated
Tip Tapers to 0.0105"

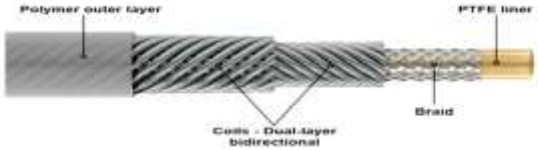
15gr

ASAHI Astato 30



20gr

Microcatéteres



COILED (torqueable)	
Big crossing profile	
Corsair Pro	2.6
Turnpike	2.6
Elong tapered	2.6
Mamba	2.4
Small crossing profile	
Corsair Pro XS	2.1
Turnpike LP	2.2
Mamba Flex	2.1
Teleport	2.0
Teleport Control	2.1
Plaque modifying (antegrade)	
Turnpike Spiral	2.9
Turnpike Gold	2.9
Tornus	2.1

BRAIDED (non-torqueable)	
Straight tip	
Finecross MG	1.8
SuperCross straight	1.8
Elong straight 1.7	1.7
Elong straight 1.9	1.9
Pronavi straight	1.7
Microcross 14	1.6
Navitian	1.9
Tapered tip	
Caravel	2.1
Nhancer Pro X	2.2
Pronavi tapered	2.1
M-Cath	2.0
M-Cath flexy	2.1
Telemark	

DUAL-LUMEN	
Rx/OTW	
Sasuke	2.5/3.3
Nhancer Rx	2.3/3.3
FineDuo	2.9
Crusade	2.9
Twin pass	3.5/3.5
Twin pass torque	2.7/3.4
OTW/OTW	
ReCross	2.3/3.3

DIRECTIONAL	
Big crossing profile	
SuperCross angled	2.4
Venture	2.2
SwiftNINJA	2.4

Mihajlo Kovacic, et al. AJC 2024

CORSAIR PRO

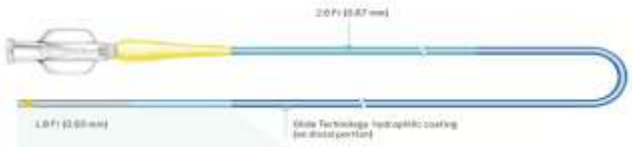
ASAHI INTECC

CARAVEL

ASAHI INTECC

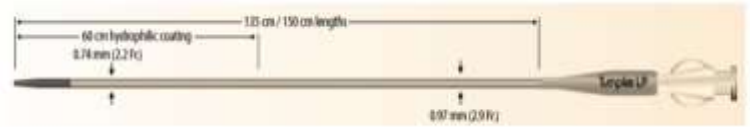
FINECROSS MG

TERUMO



TURNPIKE LP

TELEFLEX

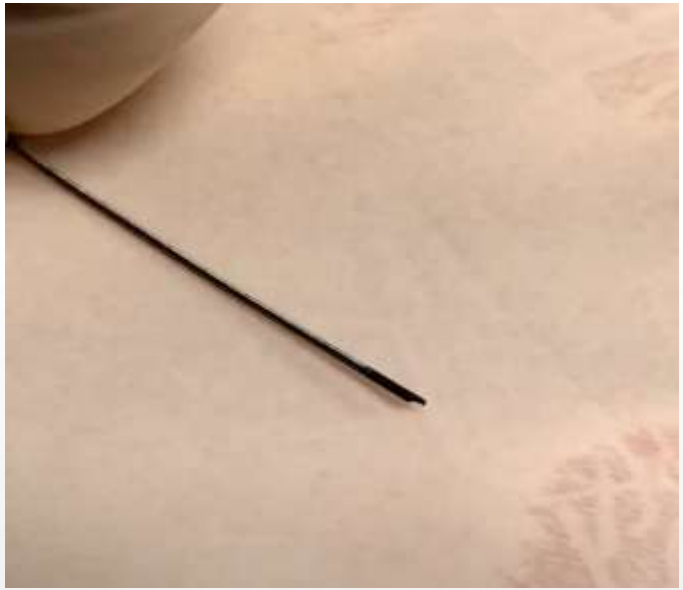


TURNPIKE GOLD

TELEFLEX

MAMBA

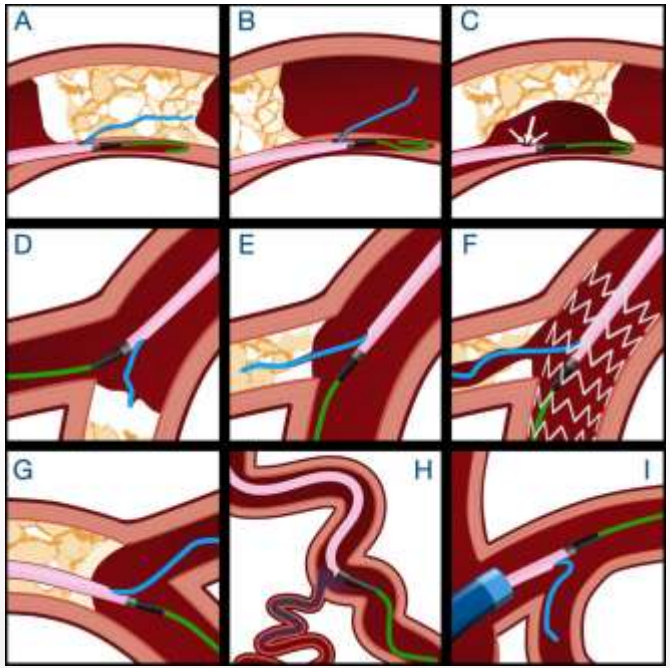
BOSTON SCIENTIFIC



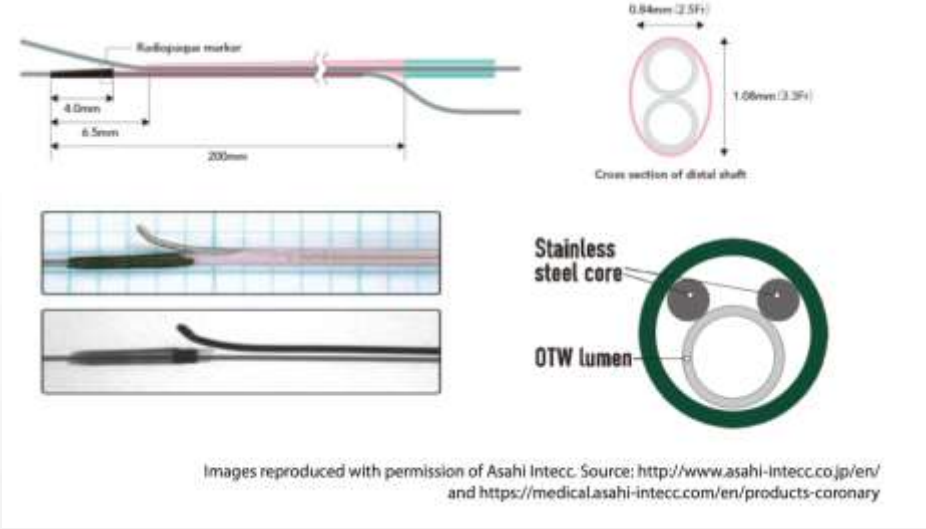
Rotura punta de Caravel

ASAHI MICROCATHETERS CHARACTERISTICS

	Main microcatheter characteristics				
	Low profile	Trackability	Support	Torquability	Crossability
ASAHI Corsair Pro			✓	✓	✓
ASAHI Caravel	✓	✓			
ASAHI Corsair Pro XS	✓	✓		✓	



Microcatéter Sasuke doble lumen



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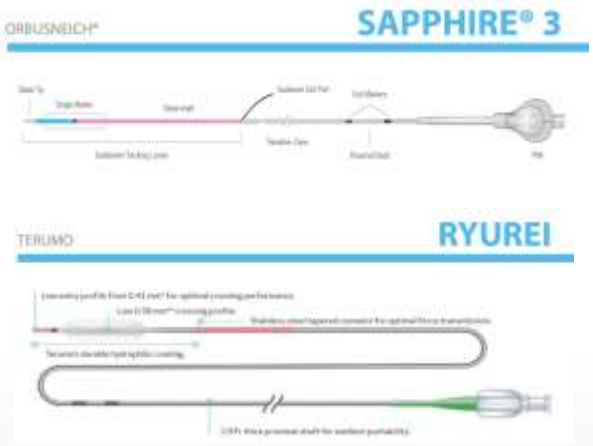
Balones

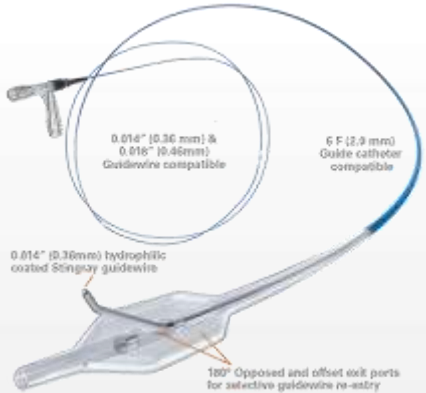
- **Pequeños**
  - iniciar las predilataciones
  - Anchoring en colaterales.
- **NC**
- OPN
- Corte, scoring



Dispositivos modificadores de calcio

Blunt atraumatic tip

Torquer device



Manejo de complicaciones: Perforaciones

	Fat	Coil
Visibility	0	+
Controlled delivery	0	+
Catheter needed for delivery	Any microcatheter	Larger microcatheter*
Availability	Universal	Often limited
Cost	0	High

Moroni F, Brilakis ES, Azzalini L. Expert Rev Cardiovasc Ther. 2021 Jan;19(1):71-87.

Mi caja de herramientas debe contener:

- **Catéteres** alto soporte + Extensor de catéter
  - EBU
  - AL1
- **Guías:** Sion blue, BMW, filder XT A-R, ultimate bros 3, Gaia next 2, confianza Pro 12, Hornet 14, gladius MG o pilot 200, RG3.
- **Microcatéteres:** Corsair pro o turnpike, corsair pro XS o turnpike lp o caravel, finecross (deliver coils).
- **Stents DES de última generación**
- **Coils, stents forrados, eco, kit pericardiocentesis, marcapasos transitorio.**

La caja de herramientas es dinámica, pasando de pequeña y simple a grande y compleja, adaptándose a las necesidades del operador y acompañando su experiencia