



# Crossing Tough CTOs

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# Disclosure

Speaker name:

..Ralf Langhoff, MD.....

I have the following potential conflicts of interest to report:

Consulting

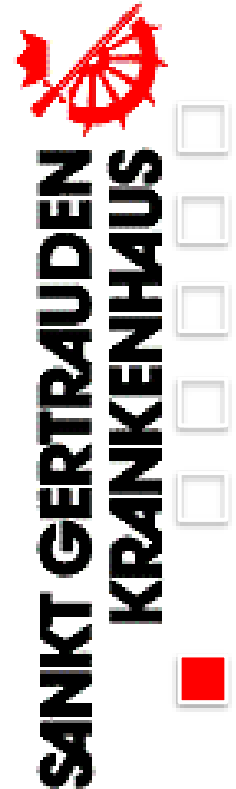
Employment in industry

Stockholder of a healthcare company

Owner of a healthcare company

Other(s)

I do not have any potential conflict of interest



# Tools To help crossing CTOs

- Access strategy
- Support catheters
- Skills and tactile sensitivity and feed back from the material
- Wires, wires, wires,...



# CLI Case left foot

78 y male,

- end stage renal disease since 16 y
- Diabetes
- art. hypertension

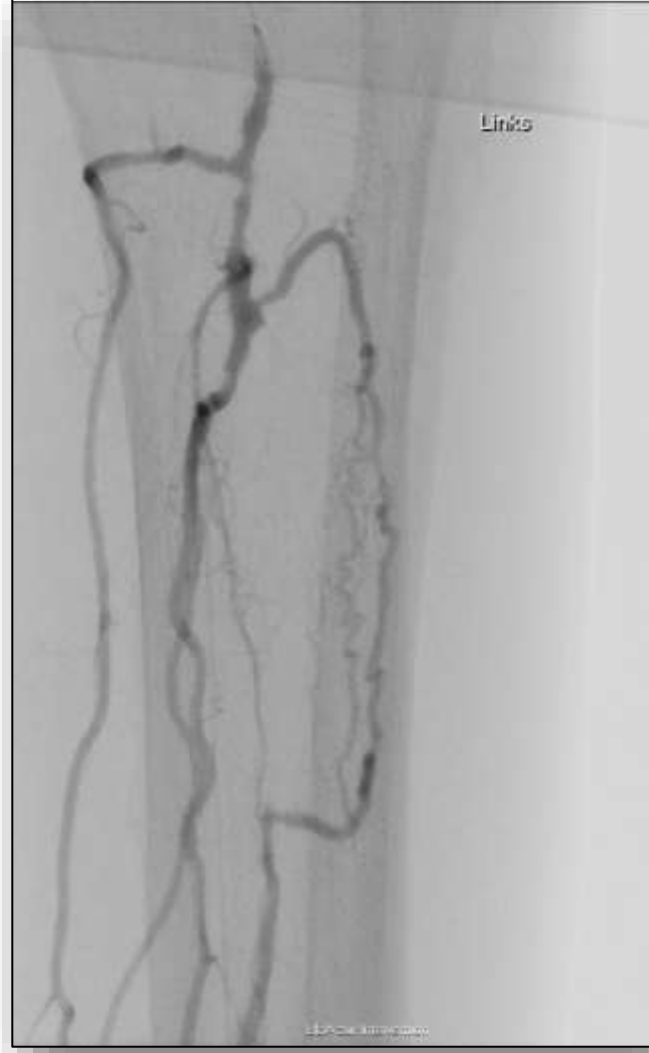
Diagnostic:

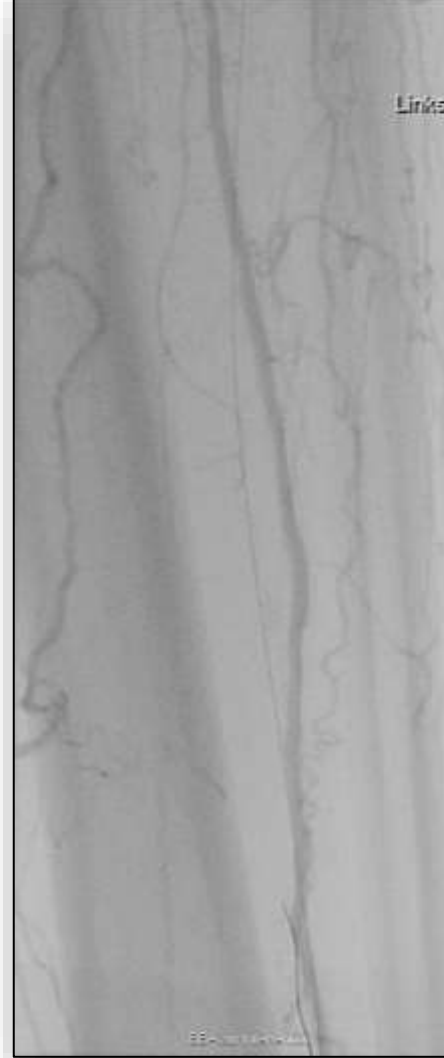
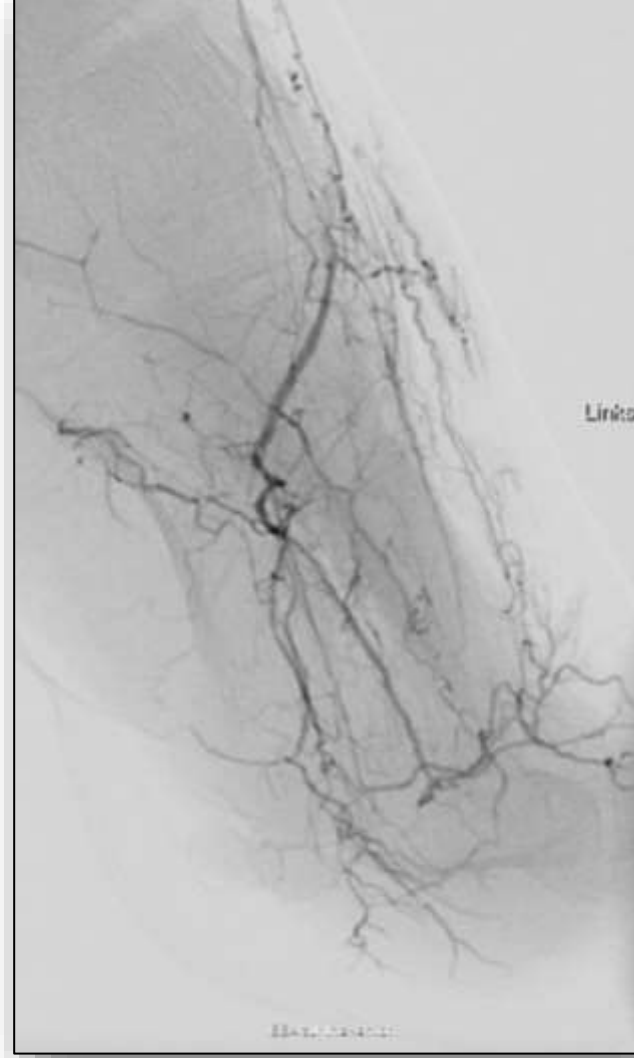
- ABI 0.9 left
- O2C= 9

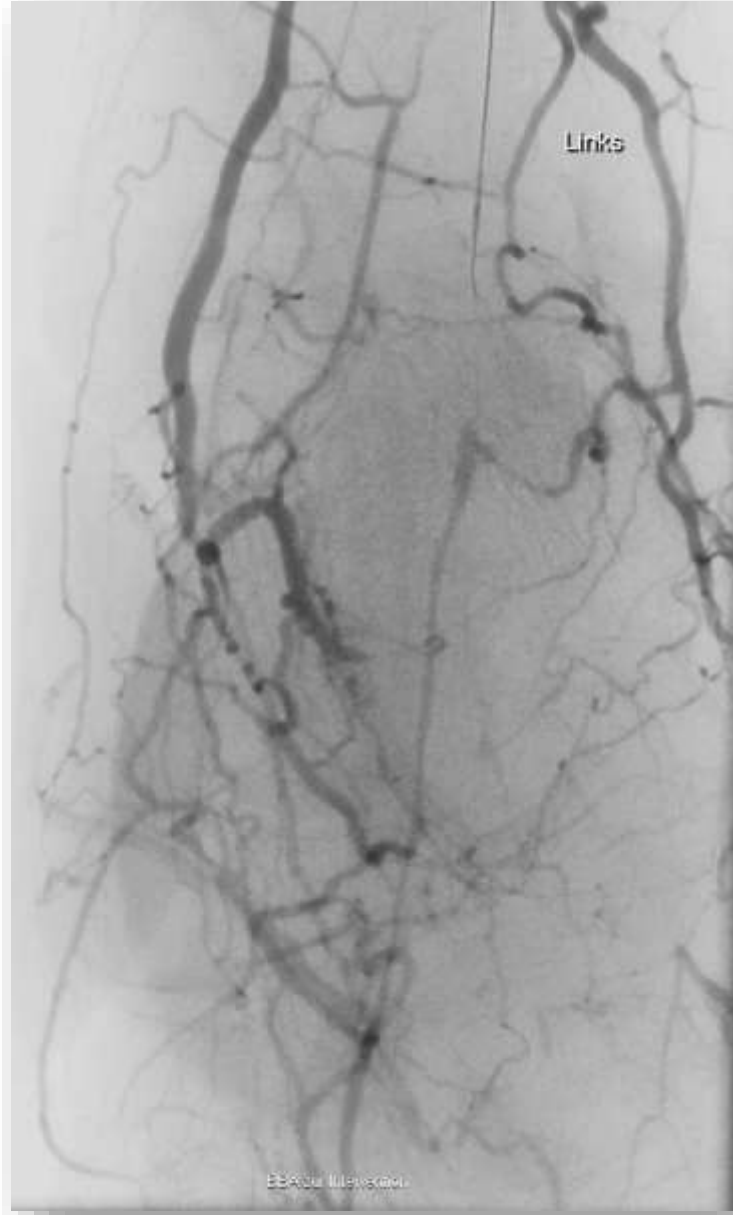
Duplex:

- occlusion of ATA,
- proximal short occlusion of Peroneal
- A. dorsalis pedis patent
- mediasclerosis

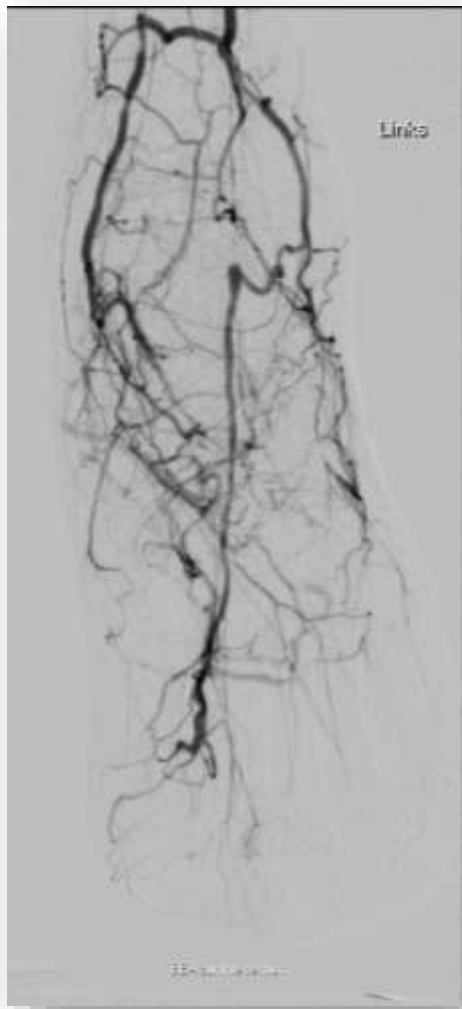
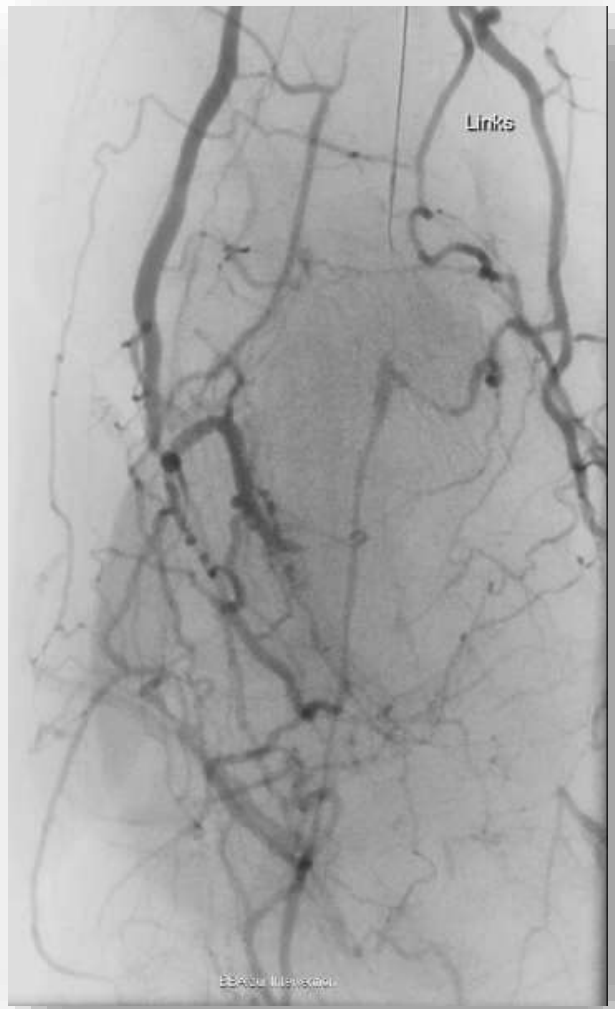




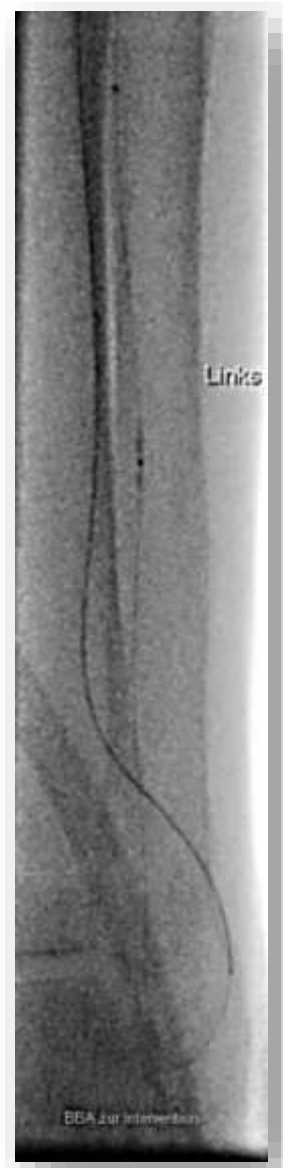




# CARNELIAN BTA Supportkatheter (Biotronik) and Regalia XS1.0 Wire (Asahi Intec)







## Product concept



### ASAHI **Halberd 0.014**

- ✦ Stiff-tip guidewire
- ✦ **Superior directional control** with strong torque transmission and penetration



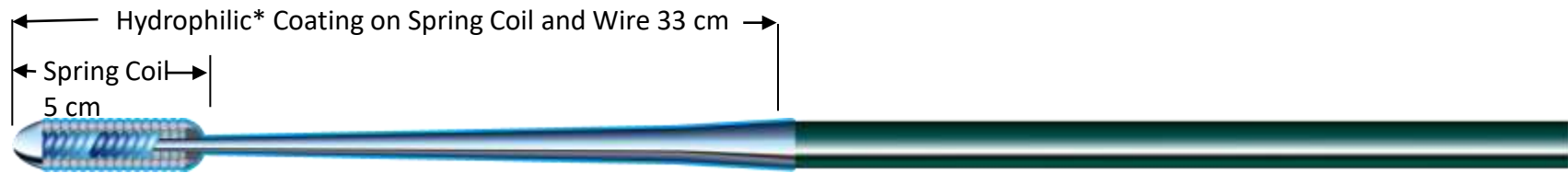
### ASAHI **Halberd 0.018**

- ✦ Stiff-tip guidewire
- ✦ **Balanced power** to cross highly resistant lesions





# ASAHI Halberd 0.014



Tip Load  
**12.0 gf**



Length  
**200 cm**  
**235 cm**  
**300 cm**

# Detailed characteristics

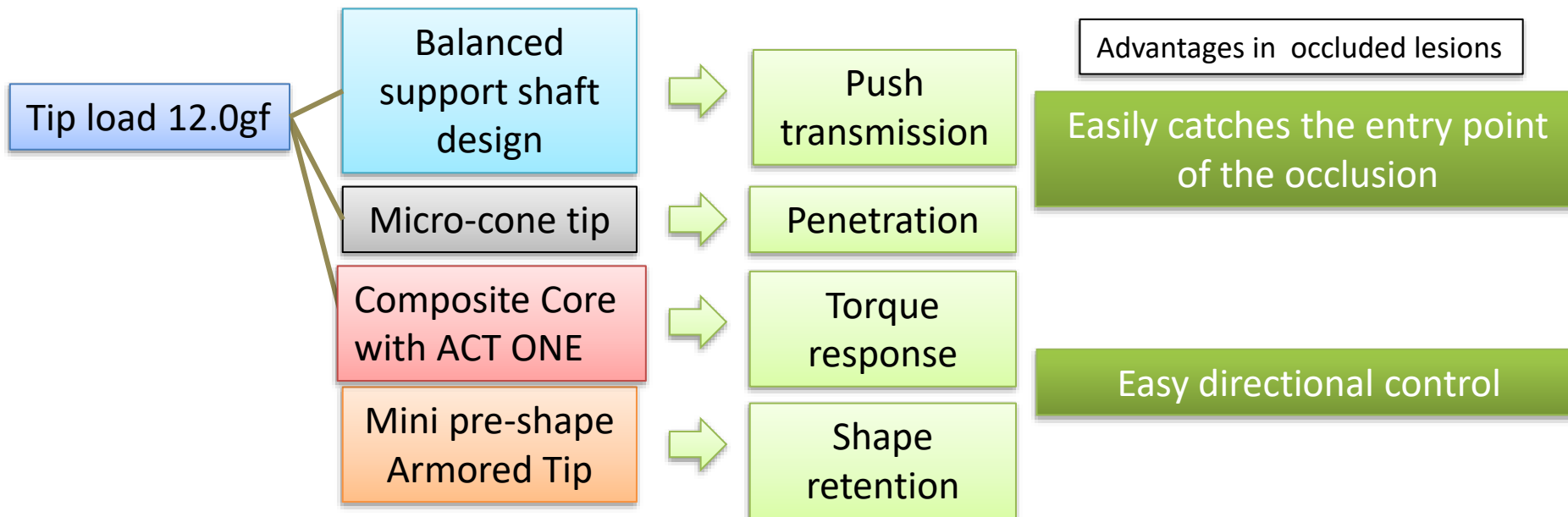


# ASAHI Halberd 0.014

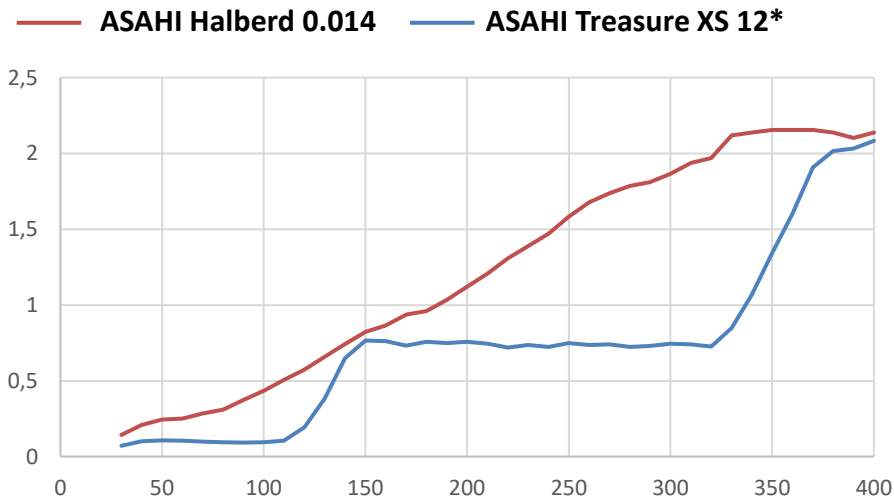
Superior directional control with strong torque transmission and penetration

## Key characteristics

## Advantages in occluded lesions

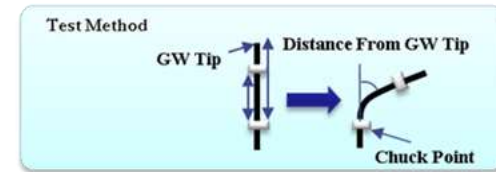


# Balanced support shaft

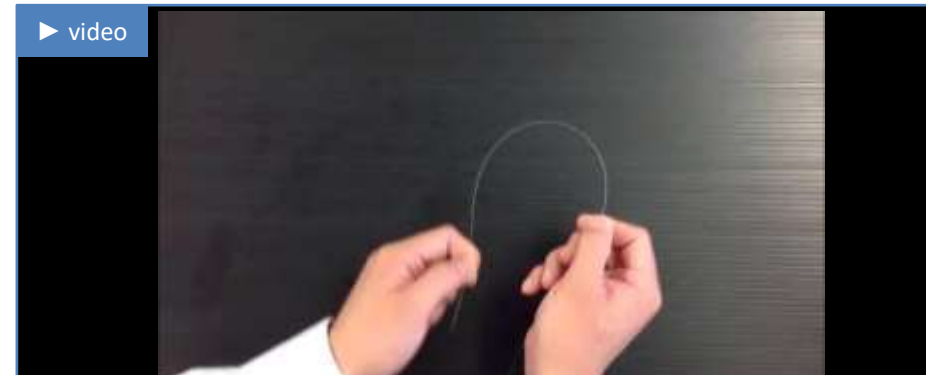


The balanced support shaft increases push force transmission

## Traditional Guide Wire

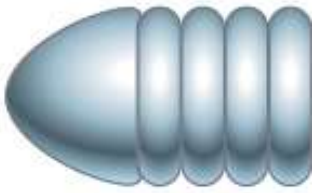


## ASAHI Halberd 0.014



# Micro-cone tip

**ASAHI Micro-cone tip**



**ASAHI Halberd**



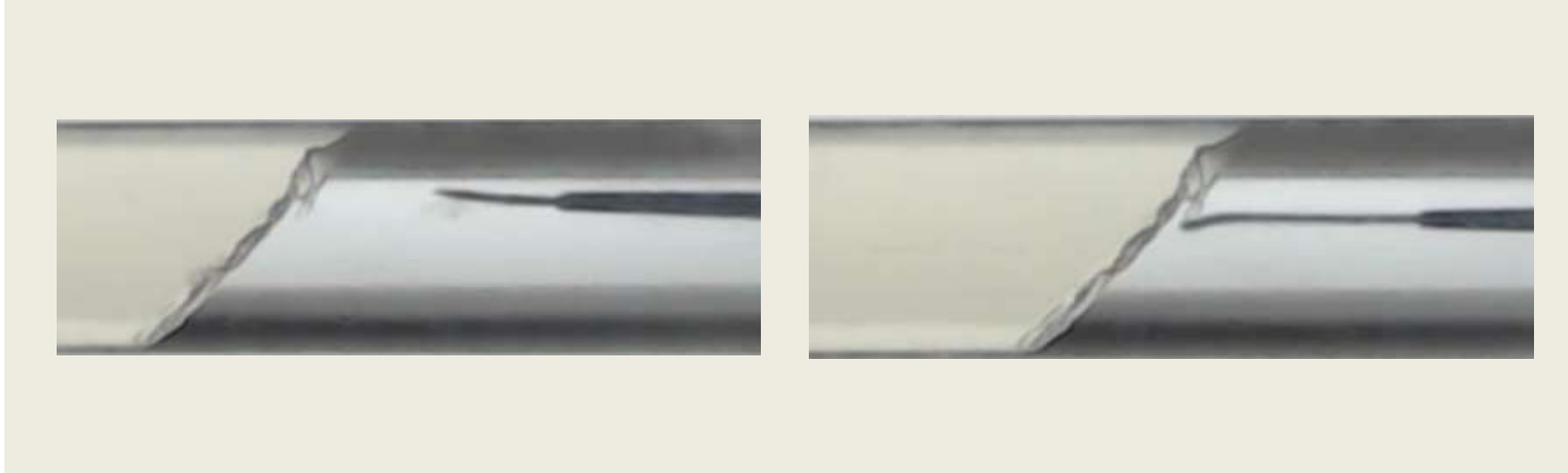
The micro-cone tip increases penetration efficacy while tip flexibility is maintained.

Useful in entering hard occlusions

**Conventional guide wire  
plain ball tip**



# Micro-cone tip



**Micro-cone tip**

**Plain ball tip**

*\*The above data was obtained by company standardized test, which may differ from industry standardized tests.*

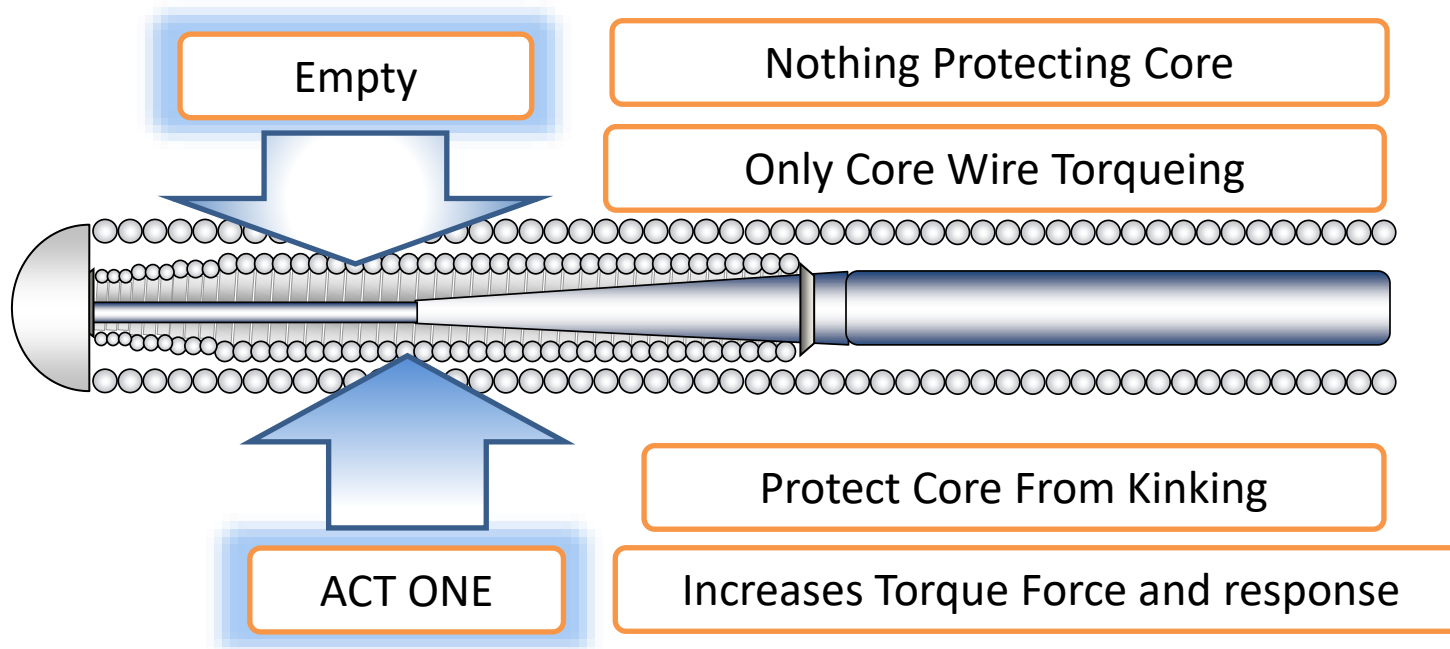
*\*The above data does not prove that all devices have exactly the same performance with the samples used for these tests.*

# Composite core

**ACT ONE**



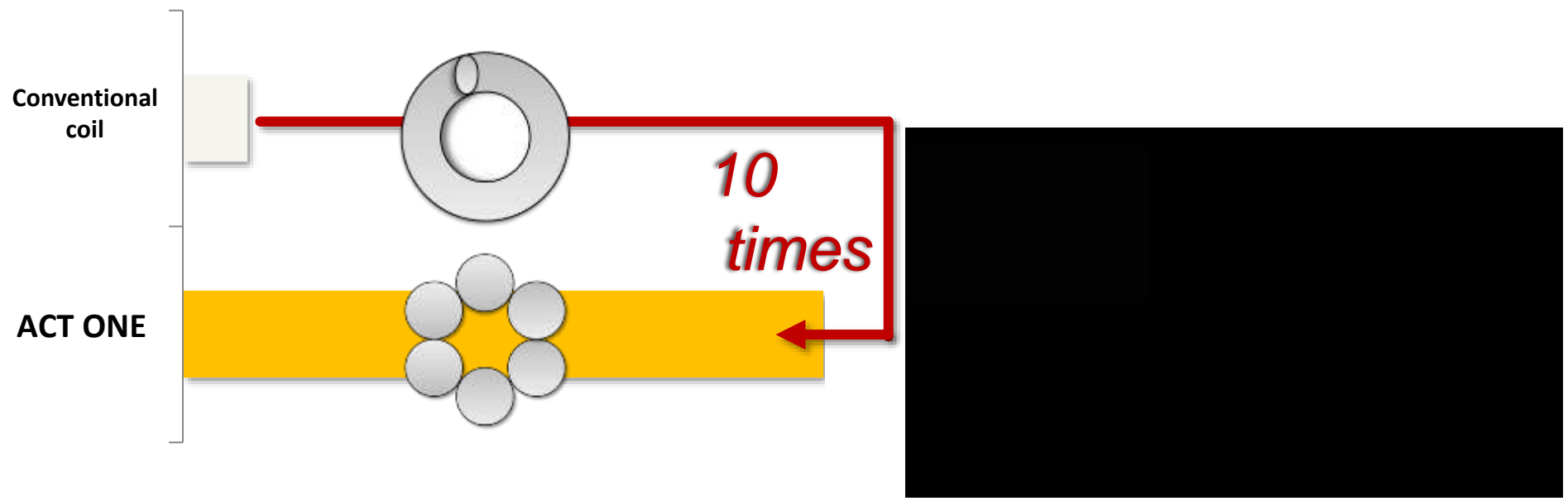
**Torque and durability**





# Composite core

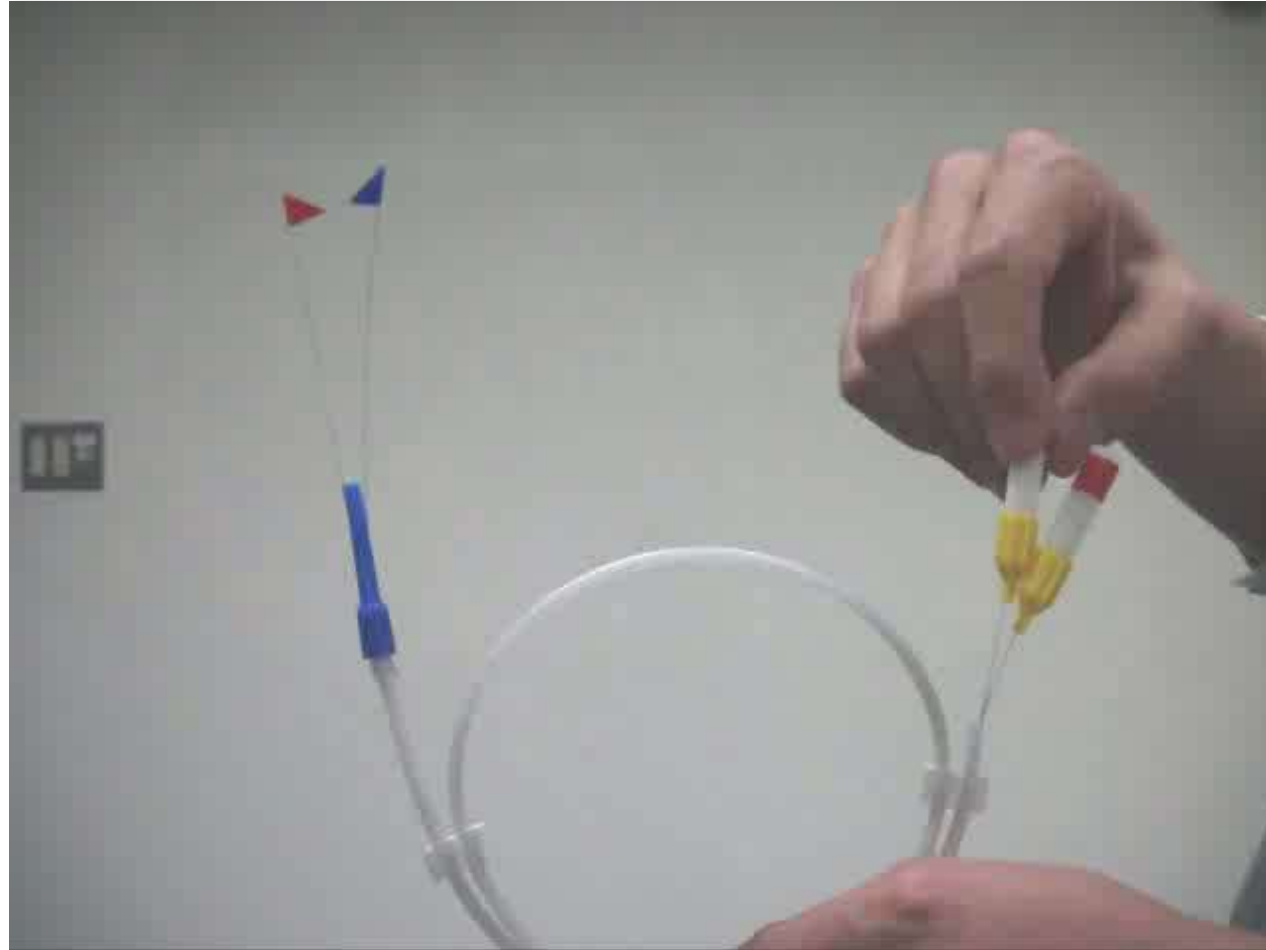
ACT ONE increases the torque force VS 'Conventional' coil



*\*The above data was obtained by company standardized test, which may differ from industry standardized tests.  
\*The above data does not prove that all devices have exactly the same performance with the samples used for these tests.*

## Composite core

ACT ONE increases the torque response



# Detailed characteristics

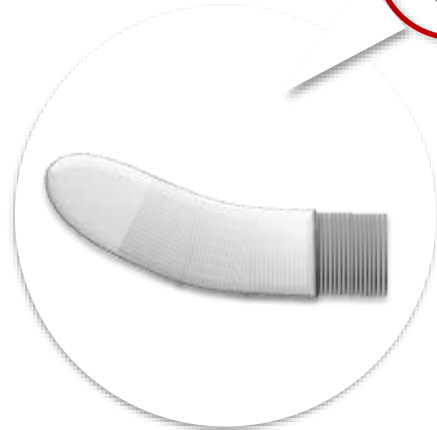


ASAHI **Halberd 0.014**



New ASAHI technology

Mini pre-shape  
Armored Tip



Soldered from the pre-shaped part  
until the ball tip

Retention of the small angle even in occluded lesions

Easy directional control in calcified occluded lesions due to  
superior tip shape retention

Able to manually apply a second curve after the soldering



- **If you are not able to cross a lesion there is no further option of treatment!**
- **Wire crossing is essential!**
- **Spend your time to armour your cath.-lab with dedicated wires and support catheters to make your life easier and your interventions especially in tough CTOs more successful!**