SRES SURGICAL & RADIOLOGICAL ENDOVASCULAR SYMPOSIUM
CASSIS
Centre de congrès Oustau Calendal
SAVE THE DATE
26 & 27 septembre 2024
www.sres-symposium.org

Quelle endoprothèse pour quelle anatomie ?

Antoine Millon, Marine Bordet

CHU Lyon

UNIVERSITÉ DE LYON

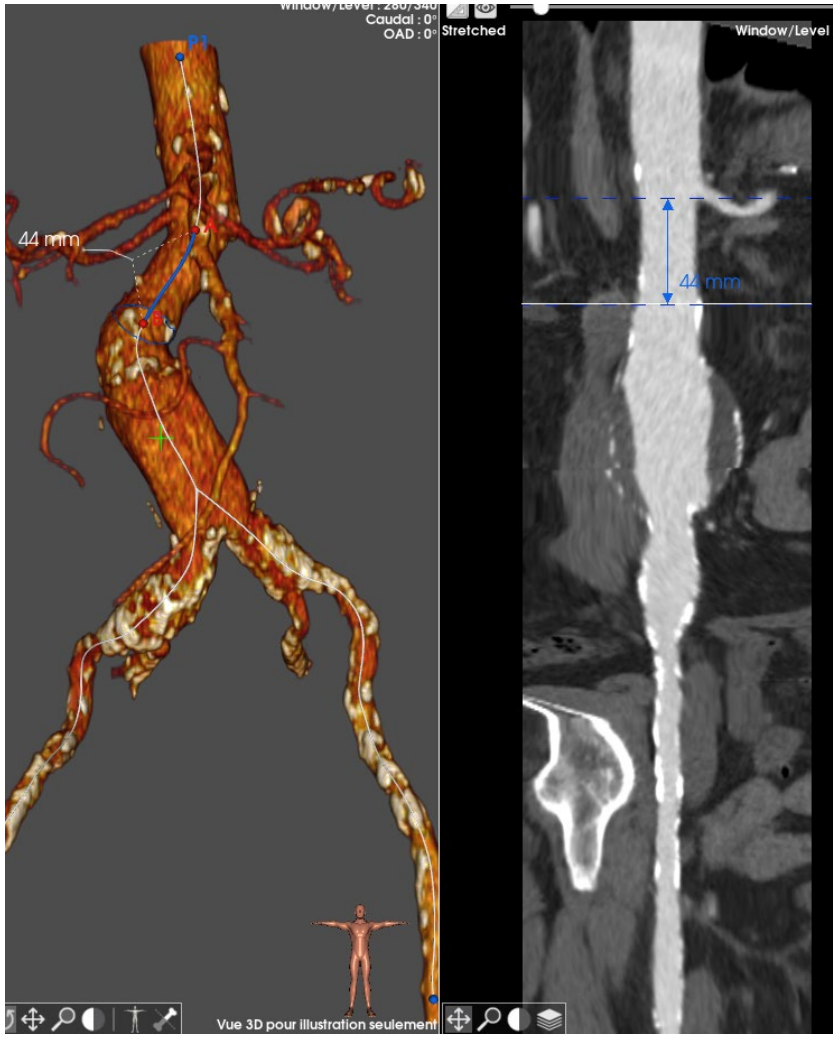
HCL HOSPICES CIVILS DE LYON

Centre aorte Lyon

- Conflits d’intérêts

  - Medtronic
  - Gore
  - Terumo Aortic
  - Cook

AAA sous renal à collet sain



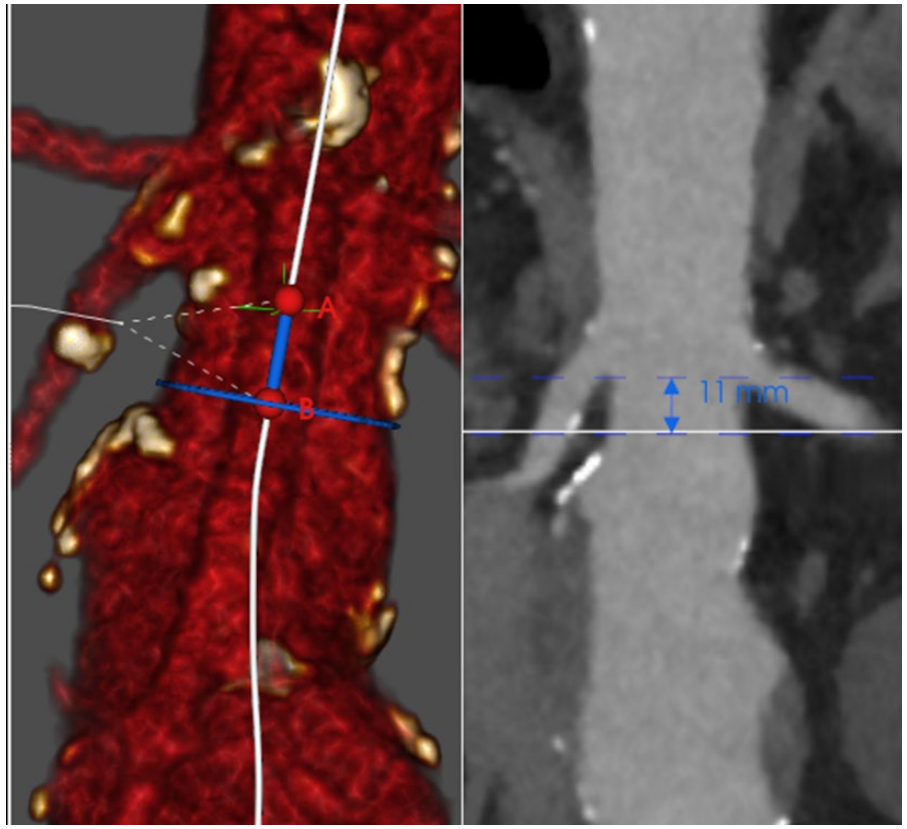
- **EVAR Gore Excluder**

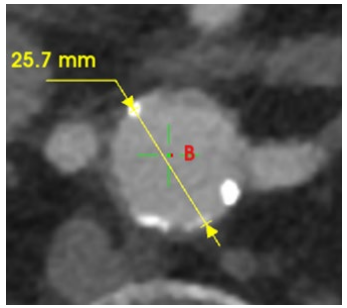
  - Simplicité de pose
  - Reproductible
  - Repositionnable
  - Ancrage sous rénal +++

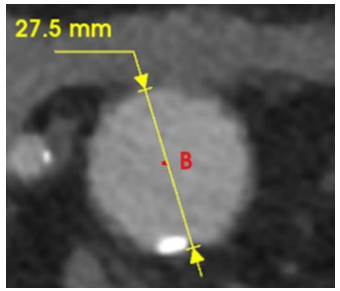
Excellents résultats à long terme
Durabilité / Perméabilité

AAA sous rénal à collet hostile
Collet court-conique

- **Longueur >7mm**
- **Diamètre <28mm**
- **Angulation <45°**
- **Sans thrombus**
- **Sans calcification**

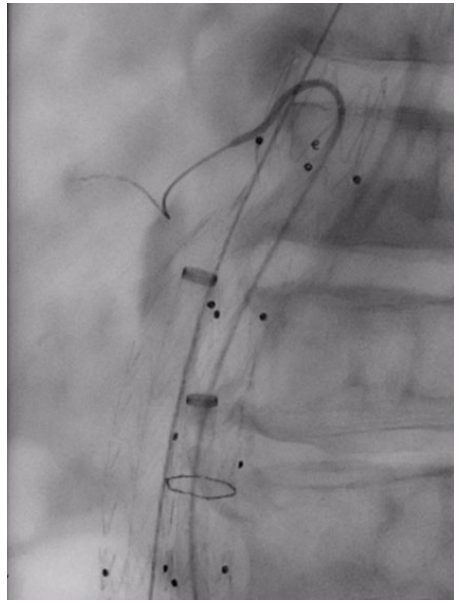


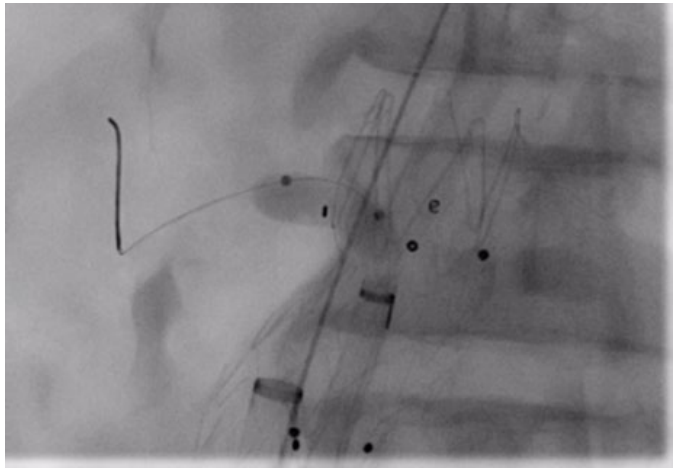




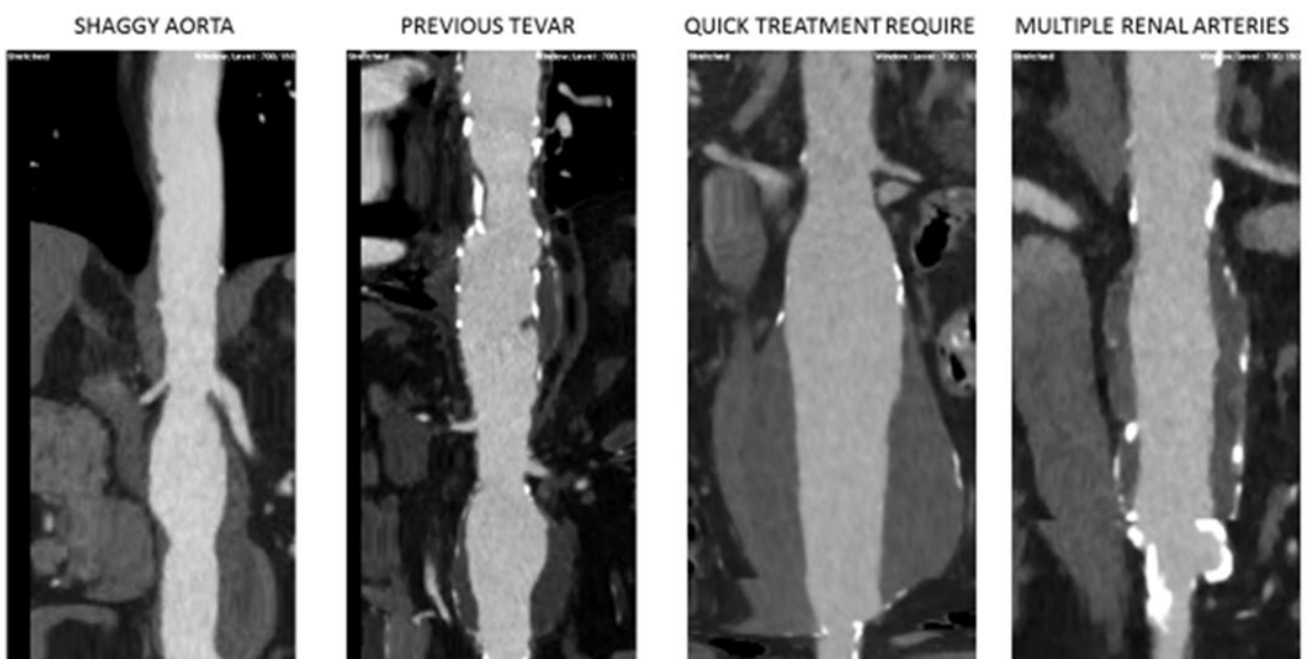
ESAR

Endurant 2
Medtronic
+
APTUS





Stratégie réservée aux patients à haut risque Open et FEVAR



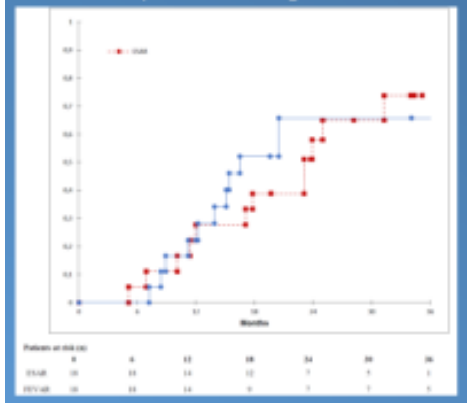
Résultats à moyen terme encourageants

EndoSuture aneurysm repair versus fenestrated aneurysm repair in patients with short neck abdominal aortic aneurysm

Marine Bordet, MD,[a,b] Alexandre Oliny, MD,[a] Tiphaine Miasumu, MD,[a] Philippe Tresson, MD,[a] Patrick Lermusiaux, MD,[a,b] Nellie Della Schiava, MD, PhD,[a] and Antoine Millon, MD, PhD[a,b] Bron and Villeurbanne, France

J Vasc Surg 2023

Aneurysm Shrinkage



Median Follow Up
23 months (19-33) in ESAR Group and 36 months (22-57) in FEVAR Group

- **Regression**
  - In 12 ESAR (67%)
  - In 11 FEVAR (61%)
- **Stable**
  - In 5 ESAR (28%)
  - In 6 FEVAR (33%)
- **Increase**
  - In 1 ESAR (5%)
  - In 1 FEVAR (5%)

No significant difference

Five-year outcomes of endosuture aneurysm repair in patients with short neck abdominal aortic aneurysm from the ANCHOR registry

Frank R. Arko III, MD,[a] Benjamin J. Pearce, MD,[b] John P. Henretta, MD,[c] Mark W. Fugate, MD,[d] Giovanni Torsello, MD, PhD,[e] Jean M. Panneton, MD, FRCSC, FACS,[f] Yun Peng, MS,[g] and H. Edward Garrett Jr, MD,[h] *Charlotte and Asheville, NC; Birmingham, AL; Chattanooga and Memphis, TN; Münster, Germany; Norfolk, VA; and Santa Rosa, CA*

J Vasc Surg, 2023

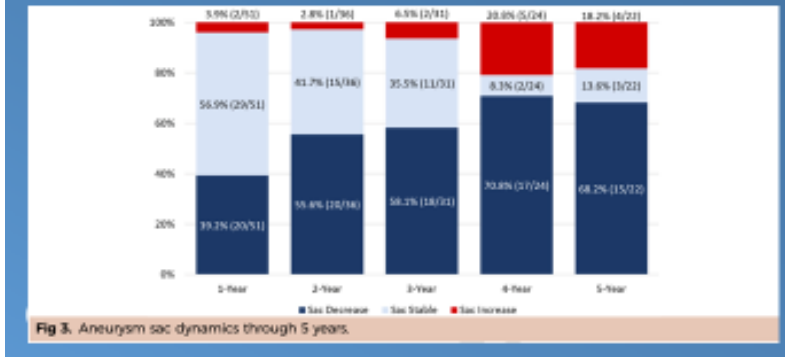


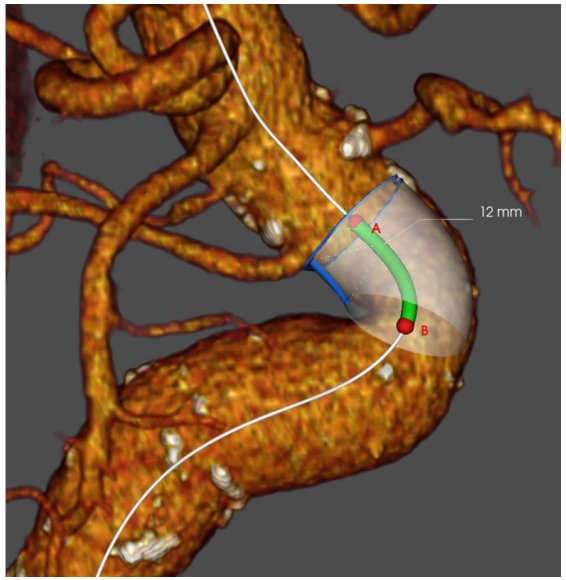
Fig 3. Aneurysm sac dynamics through 5 years.

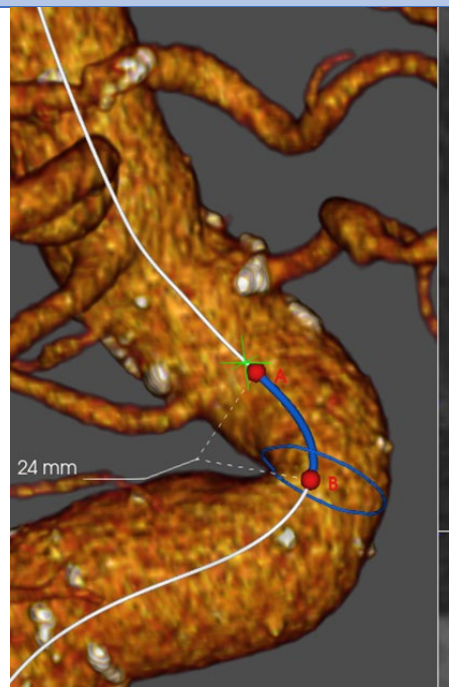
76.9 % freedom from any secondary procedure

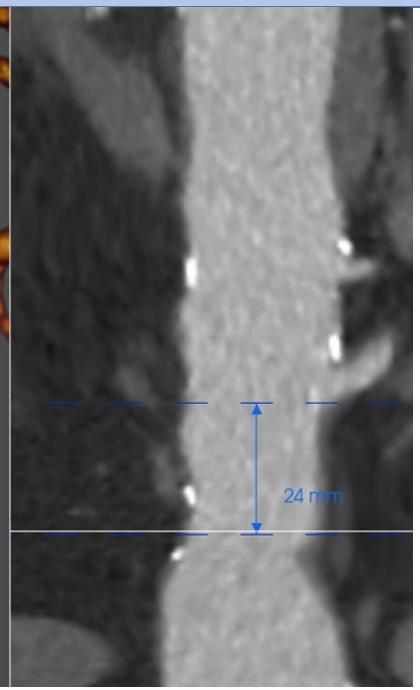
95% freedom from rupture

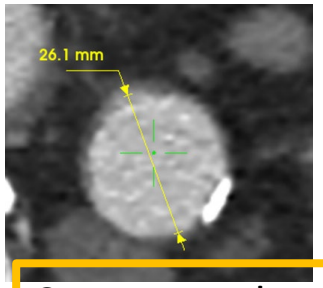
AAA sous rénal à collet hostile
Collet angulé

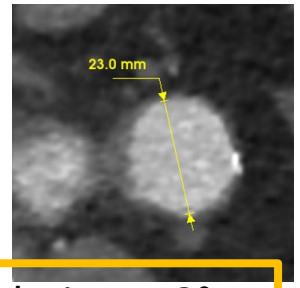
- **Longueur (Courbe interne) > 10mm**
- **Diamètre < 28mm**
- **Sans thrombus**
- **Sans calcification**







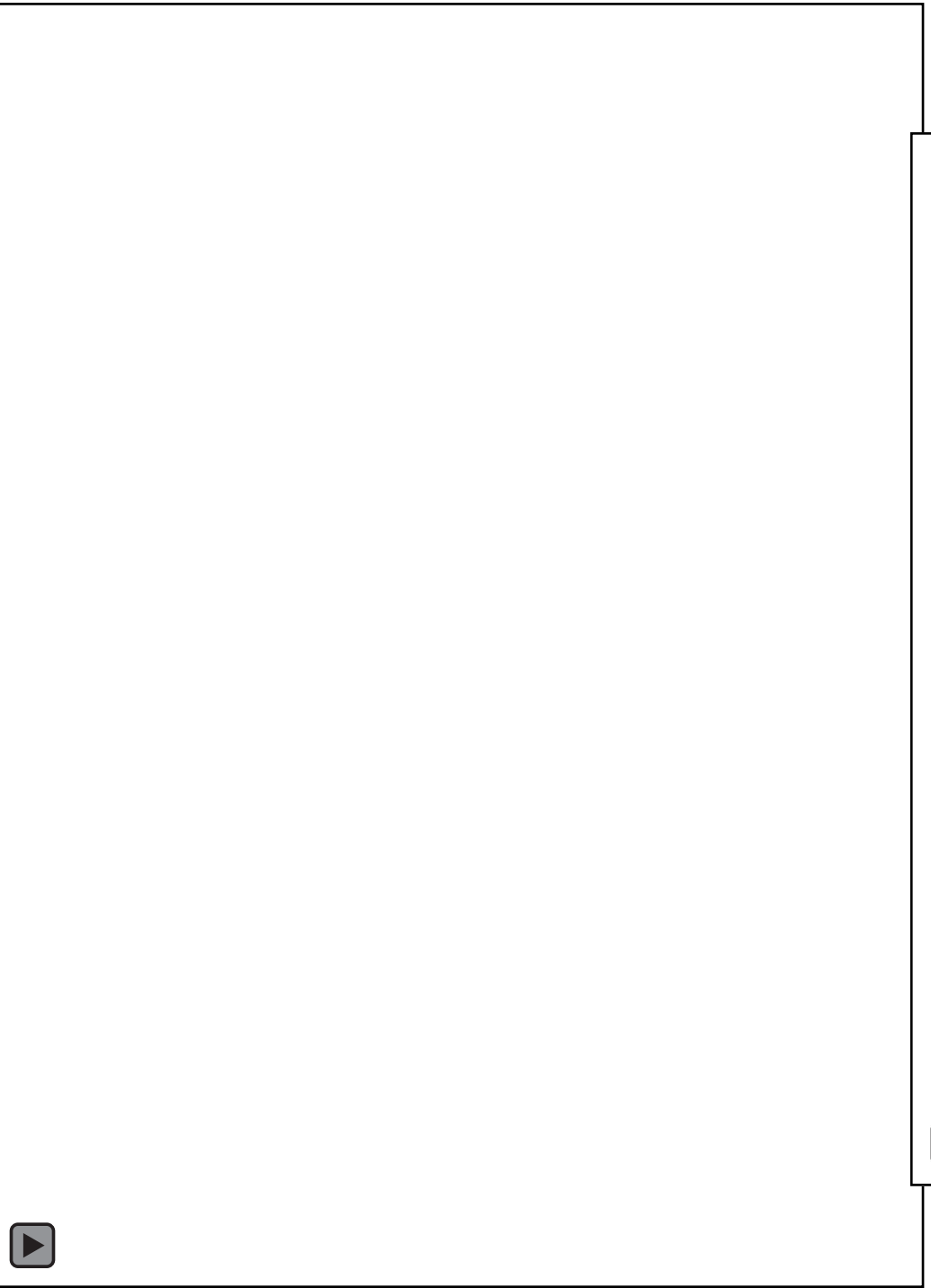


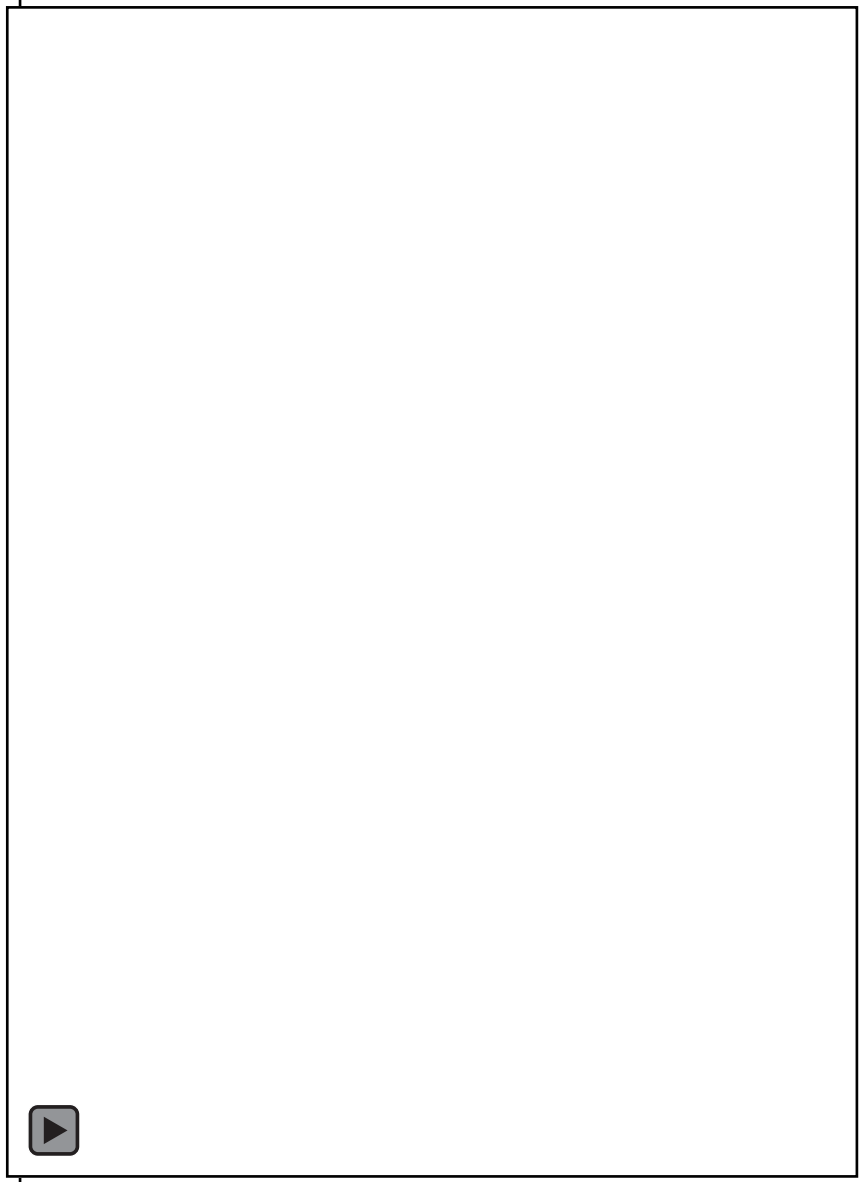


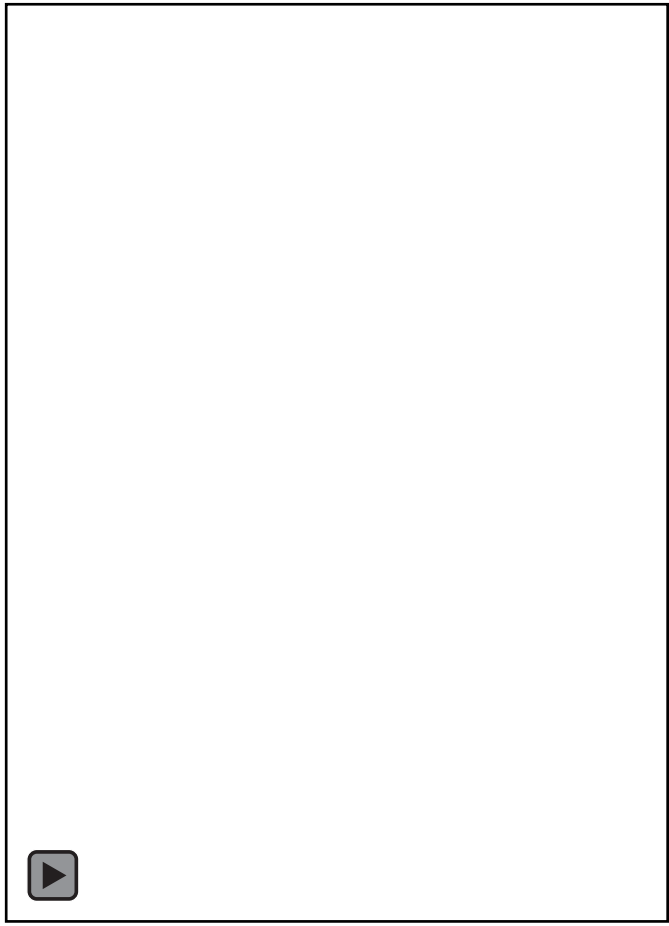
Supra Renal Angulation: 48°
Infra Renal Angulation : 73°

EVAR GORE

C3 Conformable Excluder







Stratégie réservée aux patients à haut risque Open et FEVAR

Résultats à court terme encourageants

Early Results From the Pivotal Trial Substudy of the GORE® EXCLUDER1 ® Conformable Endoprosthesis in Angulated Necks

Robert Y. Rhee, Mahmoud W. Almadani[a], Dai Yamanouchi, Gustavo S. Oderich, Sukgu Han,Erin Moore, Jon S. Matsumura

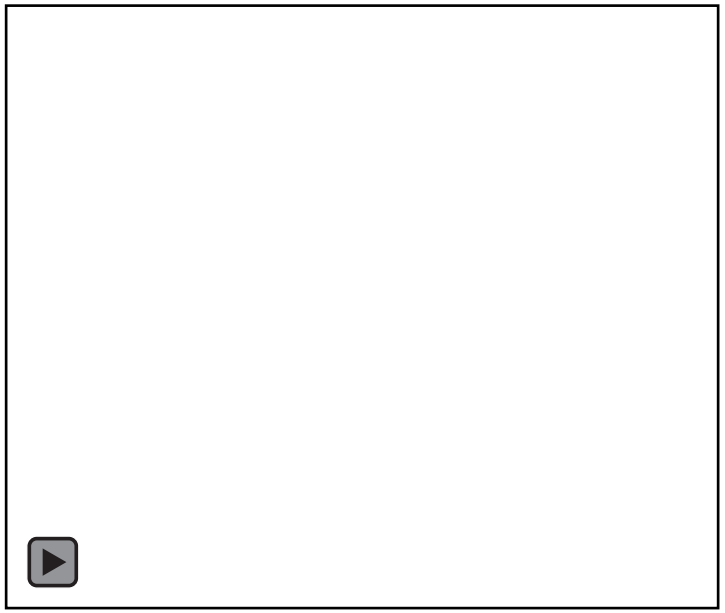
J Vasc Surg 2024

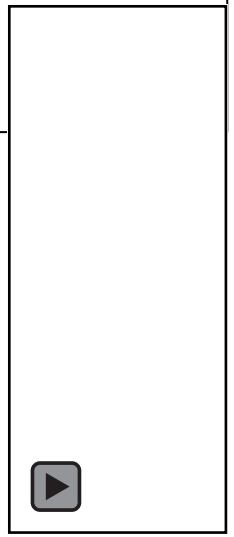
***Conclusions**: The IDE study demonstrates safety and effectiveness of the EXCC device in AAA 115 with highly angulated necks (>60° and ≤90°) are preserved at the 12-month follow-up.*

AAA Juxta Renal

AAA Sans Collet

- **Large D > 28 mm**
- **Longueur < 7mm si droit**
- **Longueur < 15mm si angulé**
- **Thrombus +++**
- **Calcification**

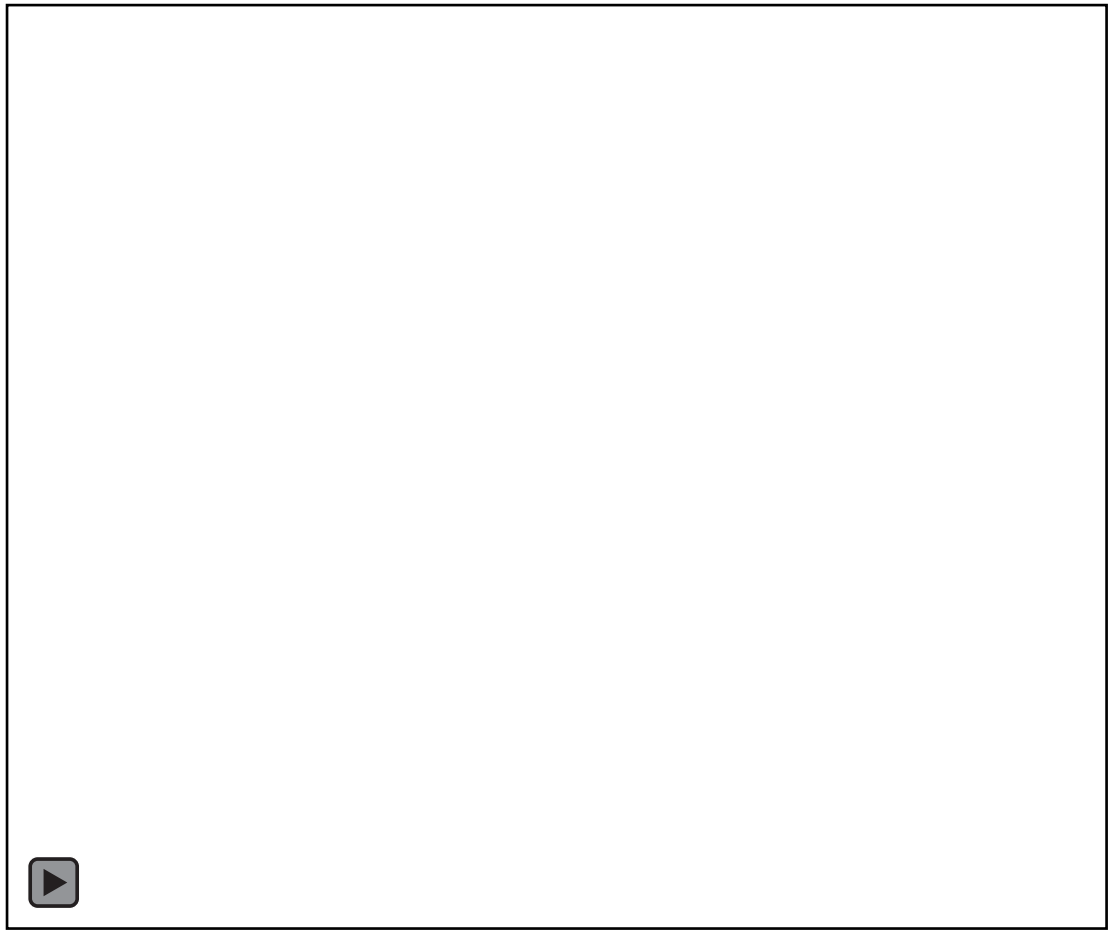


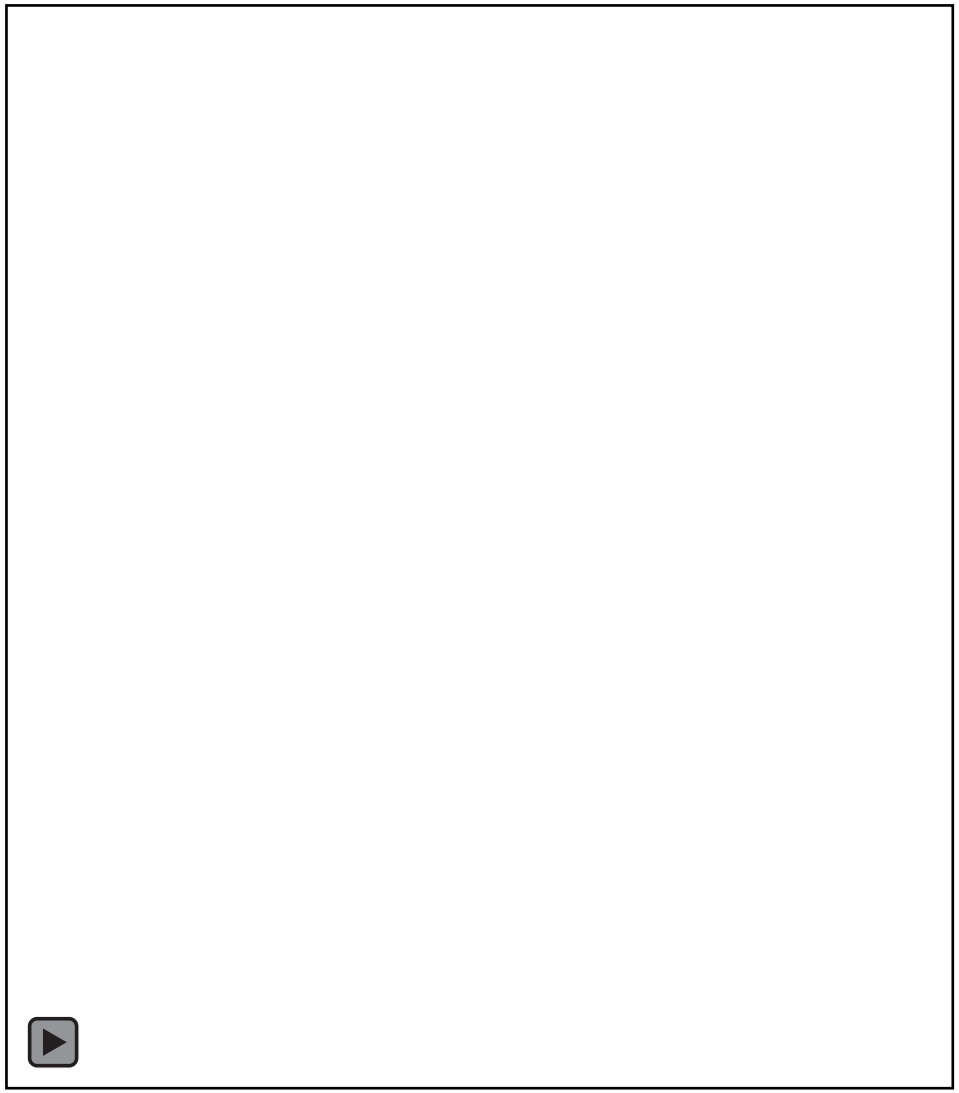


FEVAR Sur Mesure

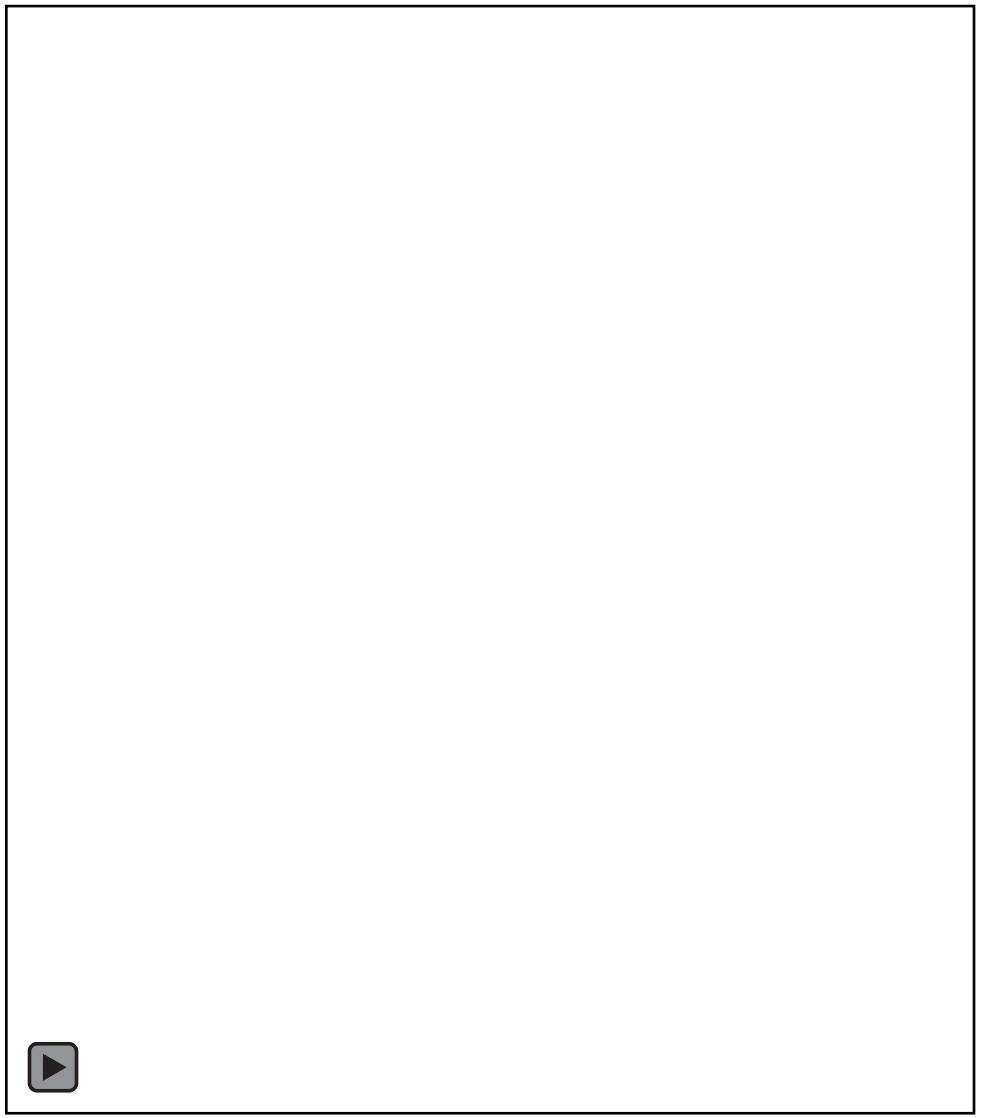
Cook Z-FEN
Terumo Aortic
(Anaconda, TreoFen)

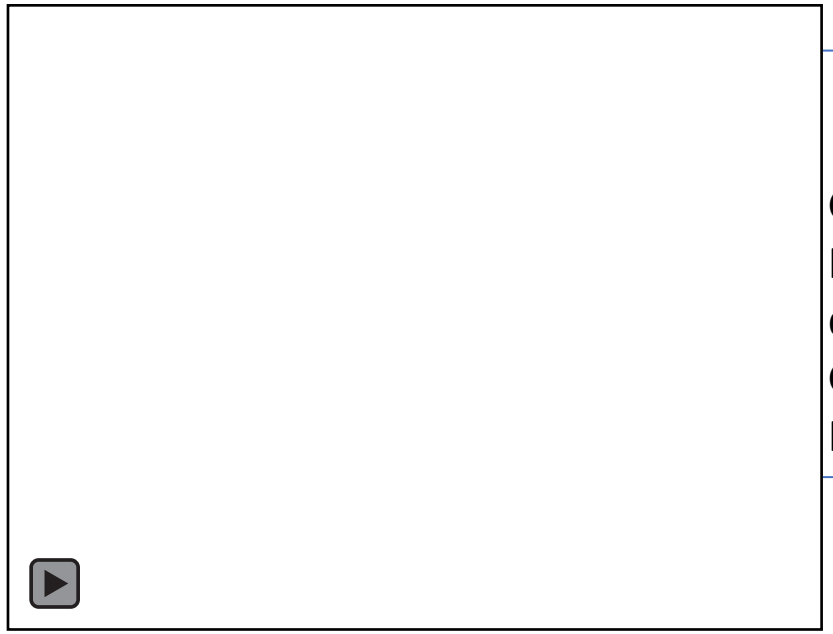
Anatomie Aorto-iliaque Angulé





Anatomie Aorto-iliaque Angulé

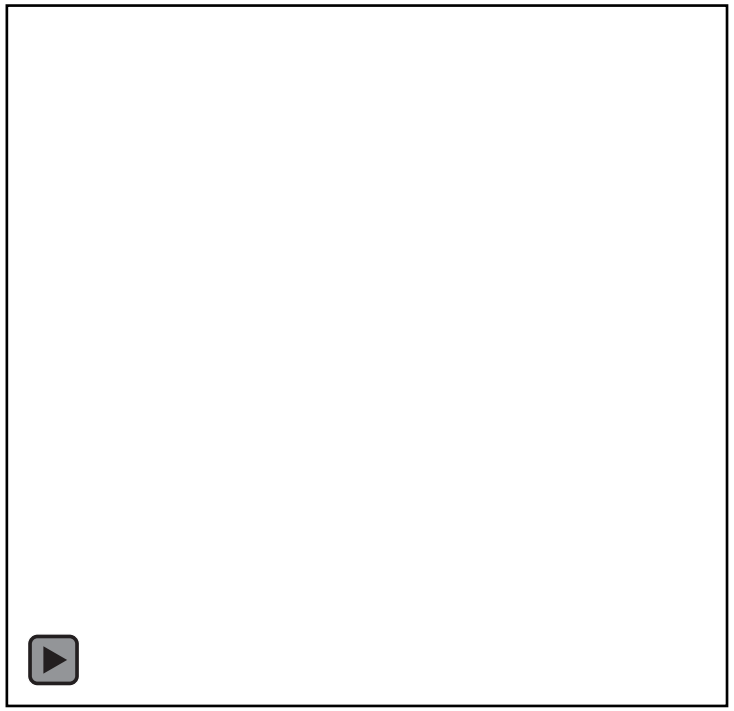


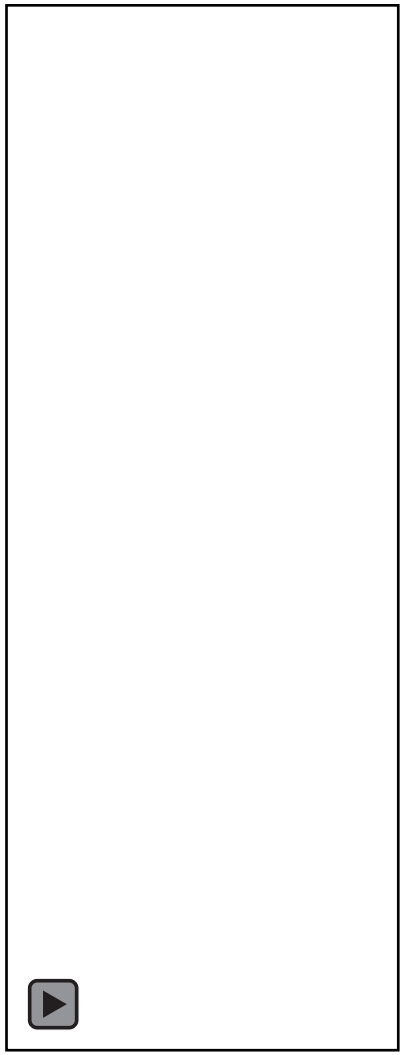


Anaconda Fenêtrée

Grande flexibilité
Plus grande tolérance /position des fenêtres
Grande conformabilité
Possibilité d'accès par le haut

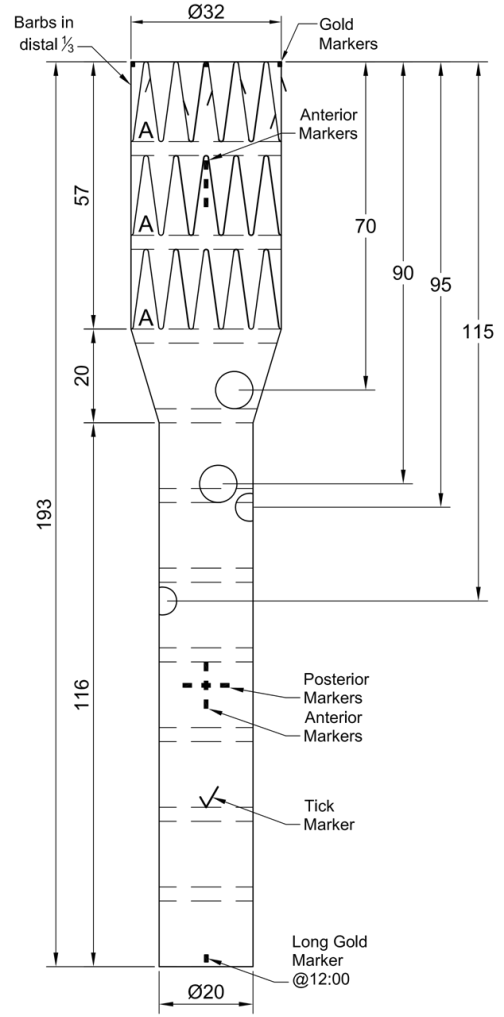
Anévrysme post dissection





REA34244_v2 | **NON STANDARD DEVICE REQUEST - PROPRIETARY COOK MEDICAL** | **VERSION 1**

Device: FENESTRATED-THORACOABDOMINAL-DEVICE
Component: G38035 - FEN-THORACO-ABDOMINAL-GRAFT



REINFORCED LARGE FENESTRATION #1
Strut Free
DIAMETER: 8mm
DIST FROM PROX EDGE: 70mm
CLOCK: 1:00
IVD: 23mm

REINFORCED LARGE FENESTRATION #2
Strut Free
DIAMETER: 8mm
DIST FROM PROX EDGE: 90mm
CLOCK: 12:30
IVD: 19mm

REINFORCED SMALL FENESTRATION #1
DIAMETER: 6mm
DIST FROM PROX EDGE: 95mm
CLOCK: 2:15
IVD: 19mm

REINFORCED SMALL FENESTRATION #2
DIAMETER: 6mm
DIST FROM PROX EDGE: 115mm
CLOCK: 9:45
IVD: 19mm

- SINGLE DIAMETER REDUCING TIES

Plus:

G32595 - AAA-BIFURCATED-GRAFT
(As per ZFEN-D-12-28-76)

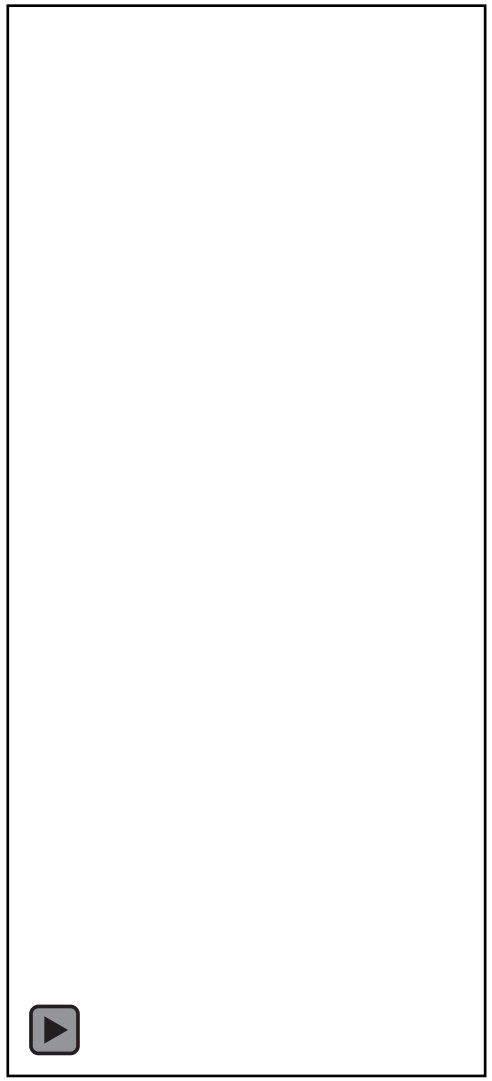
Ipsilateral Leg Extension
ZSLE-16-39-ZT

Contralateral Leg Extension
ZSLE-16-56-ZT

Please note the following: 1. By signing this graft plan you are confirming that the patient has consented to the provision of their personal information to Cook Medical. The patient understands that in order to plan and manufacture the requested device, Cook Medical may share his/her personal information with other Cook Group companies in the United States, Australia, Denmark, United Kingdom and Ireland and has consented to his/her personal information being so shared. **2.** You are confirming that all clinically important features (eg. fenestration size / orientation, gold marker placement, sealing stents) are included in this graft design prior to your approval. **3.** Unsigned plans or alterations may lead to a delay in the supply of this device. Please sign and date each page. If you wish to alter any part of this plan please initial and date each change.

Sheath Size:	20FR FLEXOR	Patient ID:	CHAABANE Mohamed
O.D.:	7.7mm	E No.:	AE98842
Sheath Length:	50cm	Doctor:	Prof. Antoine MILLON
US-MT	Drawn-B-4 Date: 31-Oct-23	Hospital:	Hopitaux de Lyon, France
Not to scale	All Dimensions shown are in mm	Drs Signature:	Date:

Anévrysme post dissection



Z FEN COOK

Grande précision
Facile à mobiliser / espace réduit

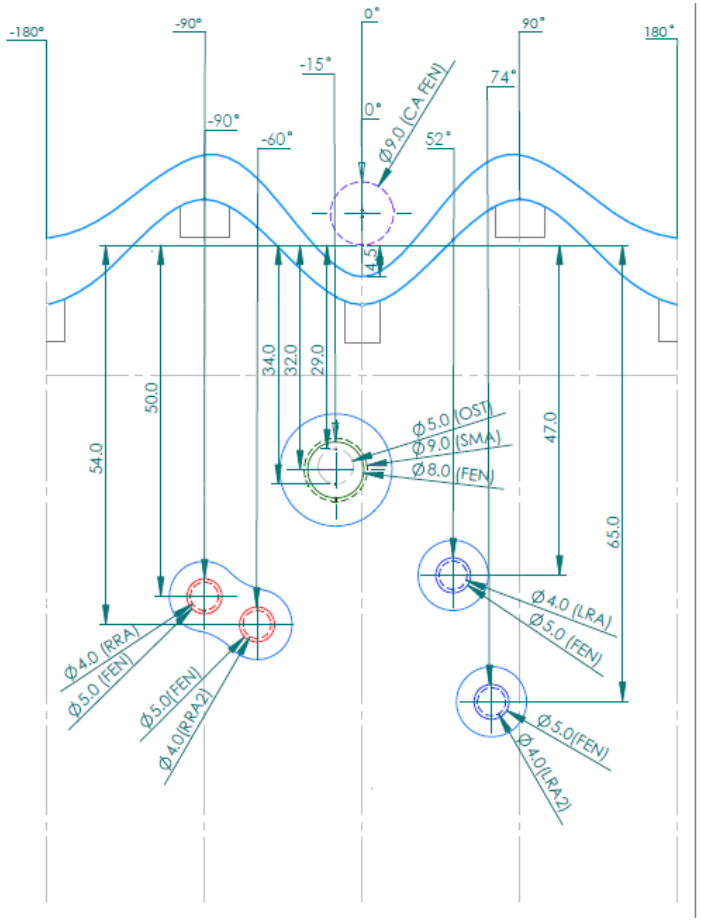
cAAA avec multiples artères rénales

Right Kidney perfused by 2 renal arteries

D_1=4,8mm / D_2=4,0mm

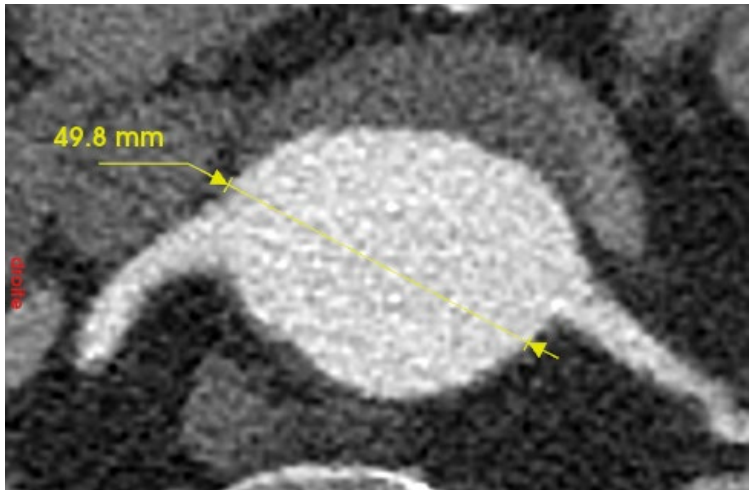
Left Kidney perfused by 3 renal arteries

D_1=4,8mm / D_2=5,2mm / D_3=3,8mm



cAAA avec multiples artères rénales

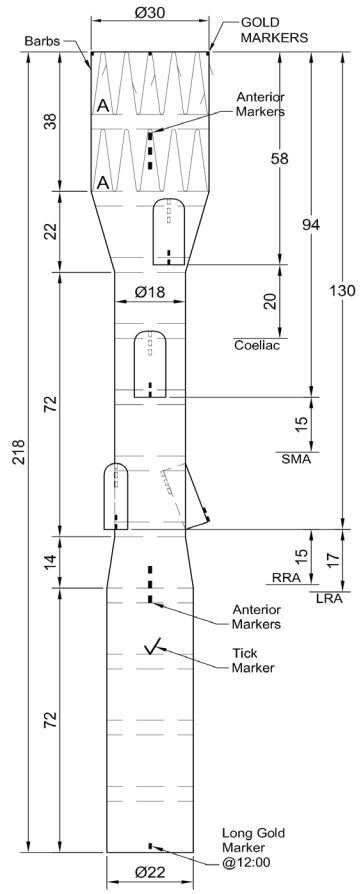
cAAA Para-renal



cAAA Para-renal

REA34244_v2 | **NON STANDARD DEVICE REQUEST - PROPRIETARY COOK MEDICAL** | **VERSION 1**

Device: BRANCH-THORACOABDOMINAL-DEVICE
Component: G38071 - THORACO-ABDOMINAL-SIDE-BRANCH



INTERNAL/EXTERNAL SIDEBRANCH #1
DIAMETER: 8mm
LENGTH: 18mm
DIST FROM PROX EDGE: 58mm
CLOCK: 1:00

INTERNAL/EXTERNAL SIDEBRANCH #2
DIAMETER: 8mm
LENGTH: 18mm
DIST FROM PROX EDGE: 94mm
CLOCK: 12:00

INTERNAL/EXTERNAL SIDEBRANCH #3
DIAMETER: 6mm
LENGTH: 18mm
DIST FROM PROX EDGE: 130mm
CLOCK: 9:30

INTERNAL/EXTERNAL SIDEBRANCH #4
DIAMETER: 6mm
LENGTH: 18mm
DIST FROM PROX EDGE: 130mm
CLOCK: 3:00

- SINGLE DIAMETER REDUCING TIES

Plus:

G32595 - AAA-BIFURCATED-GRAFT
(As per ZFEN-D-12-28-94)

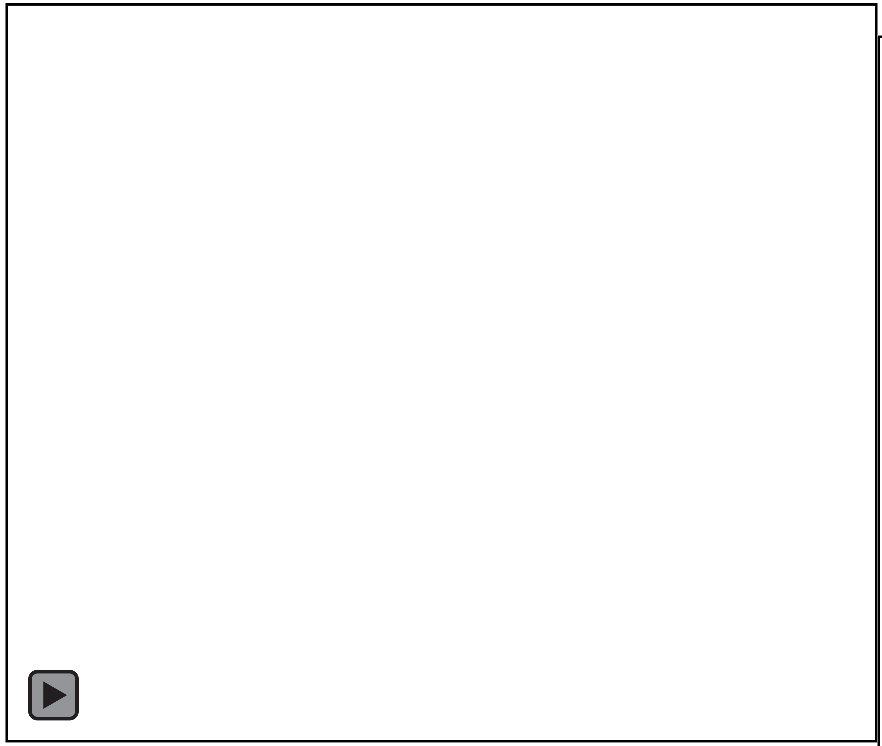
Ipsilateral Leg Extension
ZISL-16-77

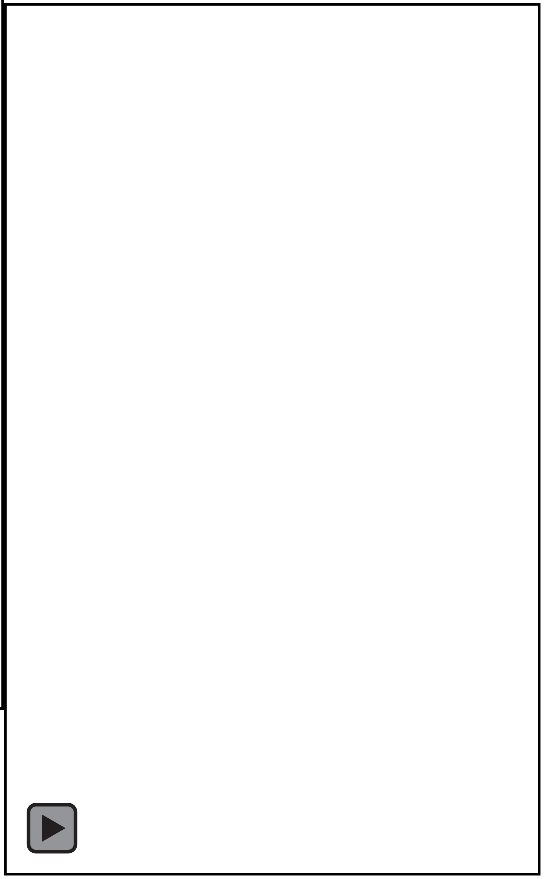
Contralateral Leg Extension
ZISL-16-77

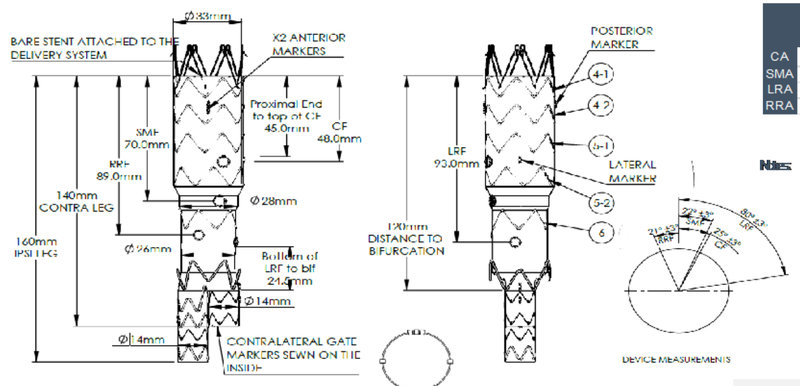
Please note the following: 1. By signing this graft plan you are confirming that the patient has consented to the provision of their personal information to Cook Medical. The patient understands that in order to plan and manufacture the requested device, Cook Medical may share his/her personal information with other Cook Group companies in the United States, Australia, Denmark, United Kingdom and Ireland and has consented to his/her personal information being so shared. **2.** You are confirming that all clinically important features (eg. fenestration size / orientation, gold marker placement, sealing stents) are included in this graft design prior to your approval. **3.** Unsigned plans or alterations may lead to a delay in the supply of this device. Please sign and date each page. If you wish to alter any part of this plan please initial and date each change.

Sheath Size:	20FR FLEXOR	Patient ID:	GUINET Jacques
O.D.:	7.7mm	E No.:	AE95289
Sheath Length:	75cm	Doctor:	Prof. Antoine MILLON
US-NC	Drawn - SC	Hospital:	Hopitaux de Lyon, France
Not to scale	All Dimensions shown are in mm	Drs Signature:	Date:

TREO-FEN (Terumo Aortic)







Custom Solutions

Custom Device Design Approval Record

CP#: 05925
Document#: Form - 0514
Rev: A

TERUMO Aortic

Case Identifier	Catalogue No.	Patient ID	Clinician	Engineer	Planner	Issue	Issue Date
PAT 4378-B1	28BC33B14014S196	DM230949	Prof Millon	Martin Lyttle	Jamie Clucas	1	19 January 2024

Device Parameters

Device Type	Delivery System	Introducer OD & Length	IFU Reference
Fenestrated TREO	Fenestrated TREO	19Fr/60cm	LSPEC-2844-8507 Rev D

SPRING DESCRIPTION	PROXIMAL	PROXIMAL	MIDDLE	MIDDLE	MIDDLE	TRANSITION
SPRING NUMBER	4-1	4-2	5-1	5-2	6	7
CONSTRAINED TO SIZE [±2mm]	23	23	23	22	18	18

Patient Parameters

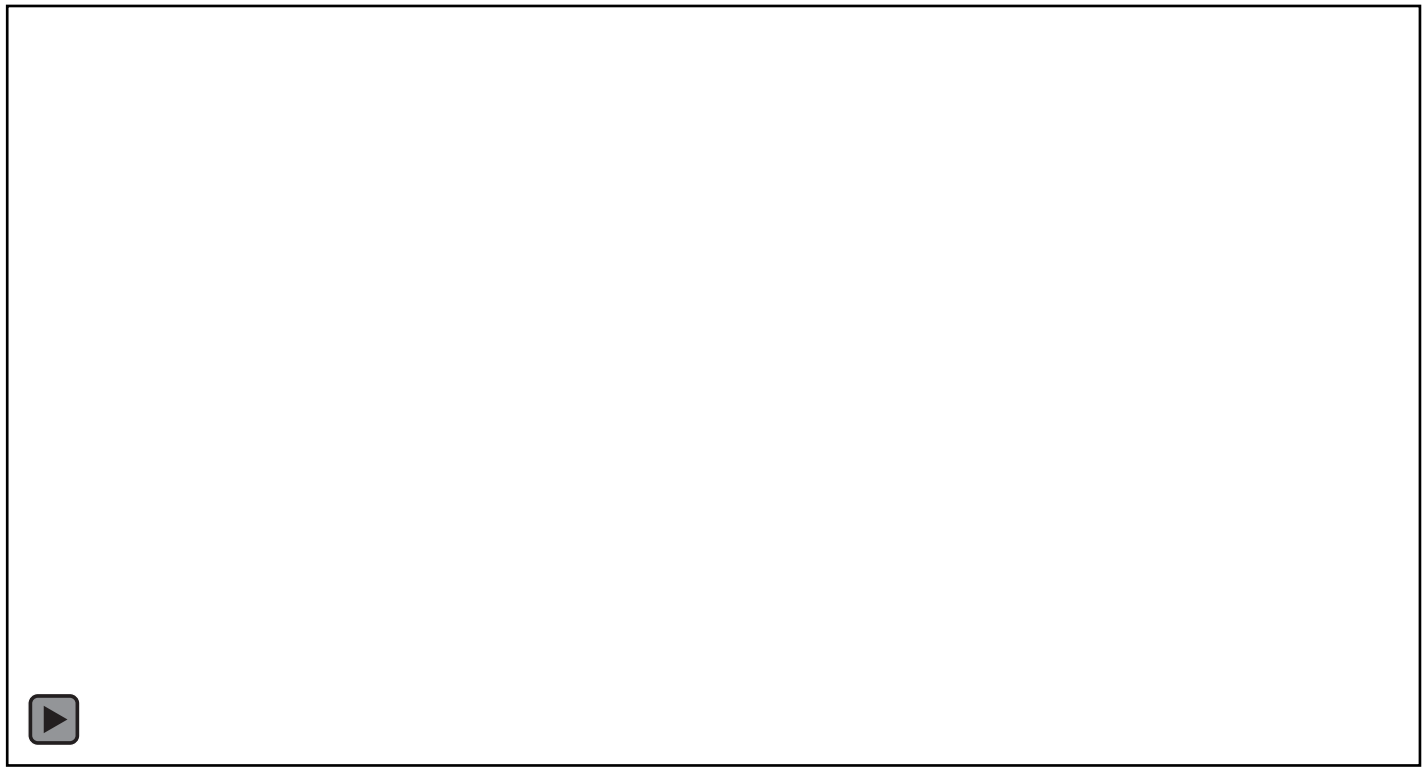
	Bottom of CA to middle of vessel (mm)	Vessel Diameter (mm)	Fenestration Diameter (mm)
CA	-	5.5	6
SMA	19	5	6
LRA	42	4.5	5
RRA	38	4.5	5

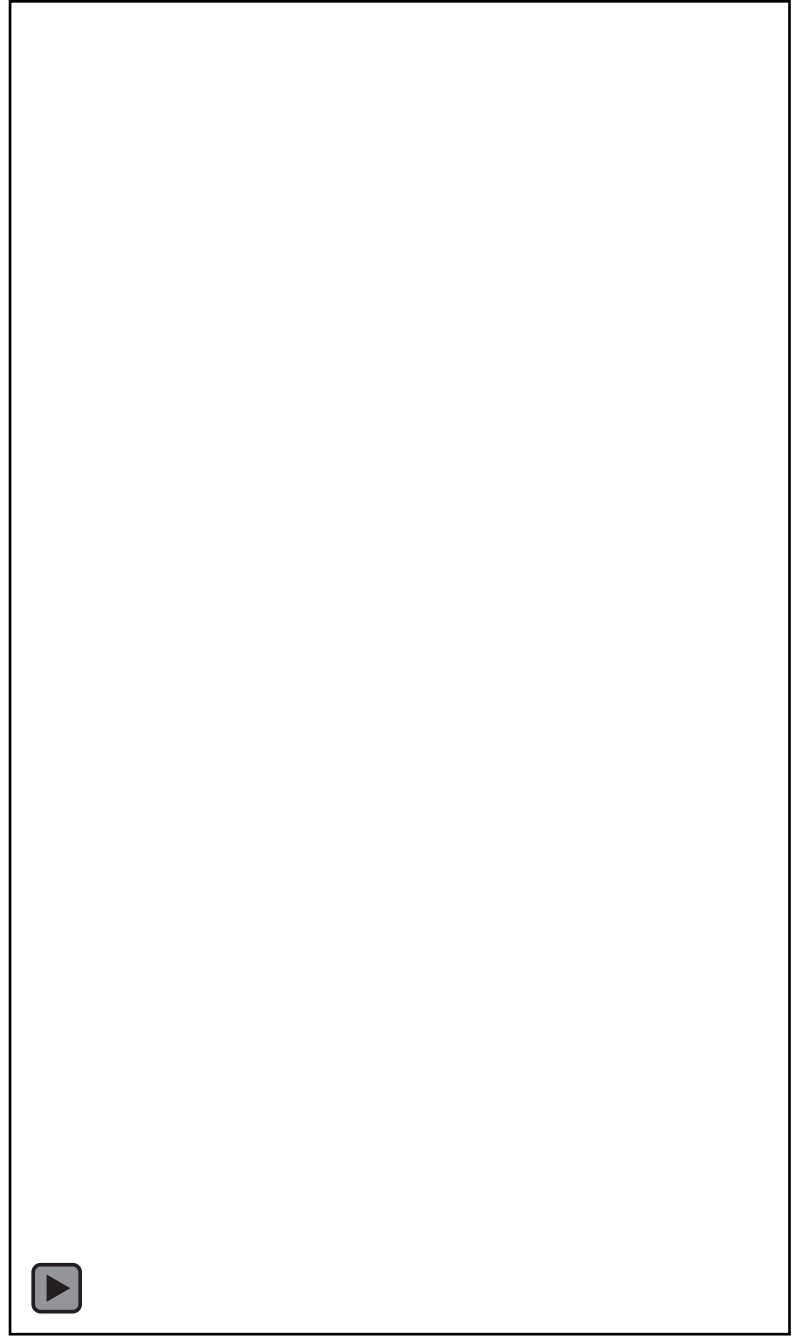
Notes: Access Side - Right
Legs in lateral orientation
Lowest fenestration to bifurcation/ top of docking zone 24.5mm
Distal markers at distal edge of contralateral leg
Maximum and minimum overlap markers on lateral edge of each distal docking zone

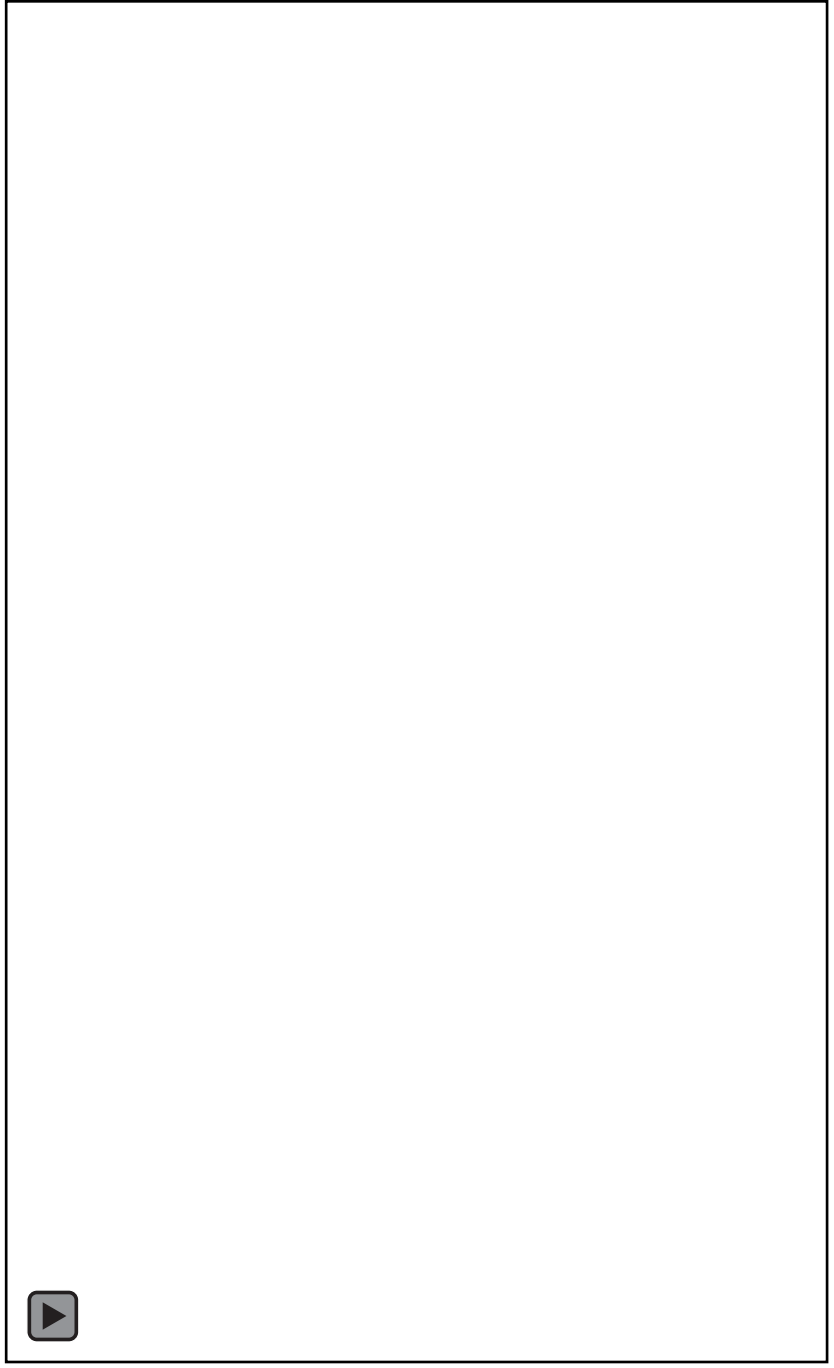
Comments

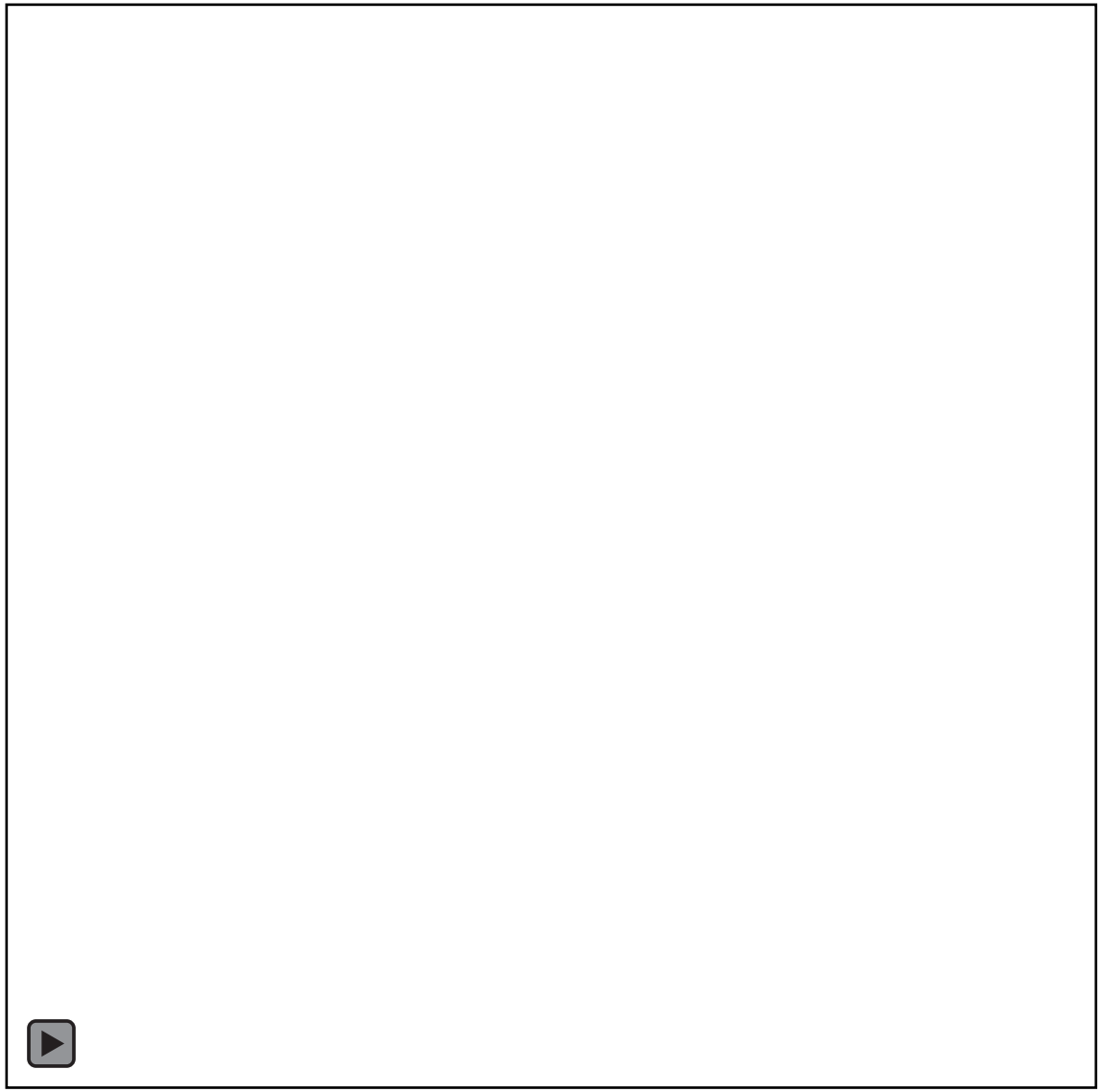
Existing Stent within RCIA/REIA.

Calcified stenosis proximal LCIA. Paving and cracking technique to be undertaken before intervention.

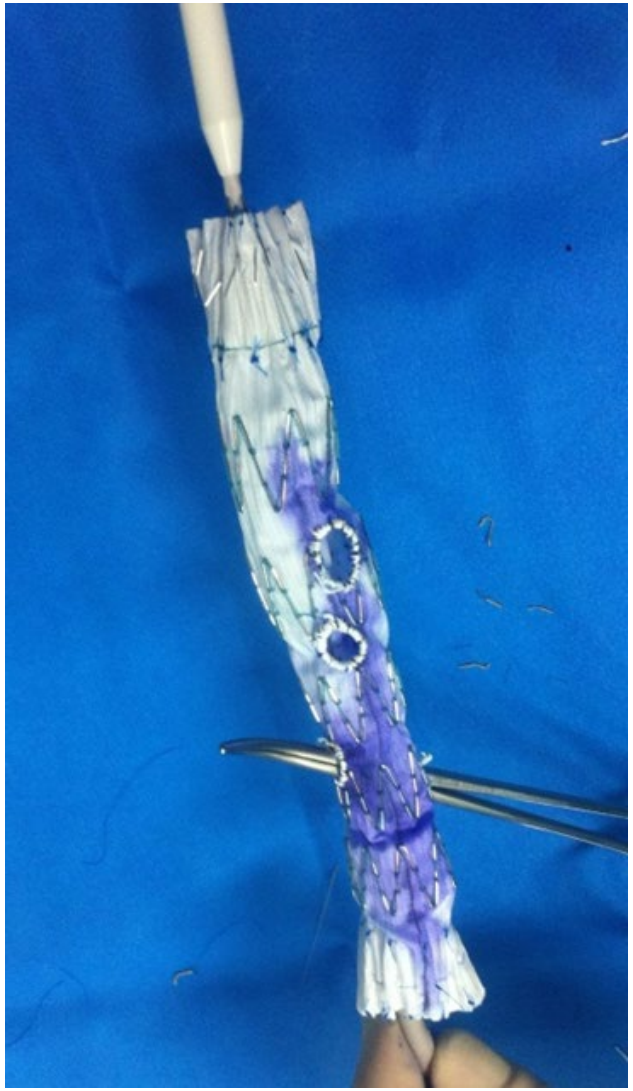


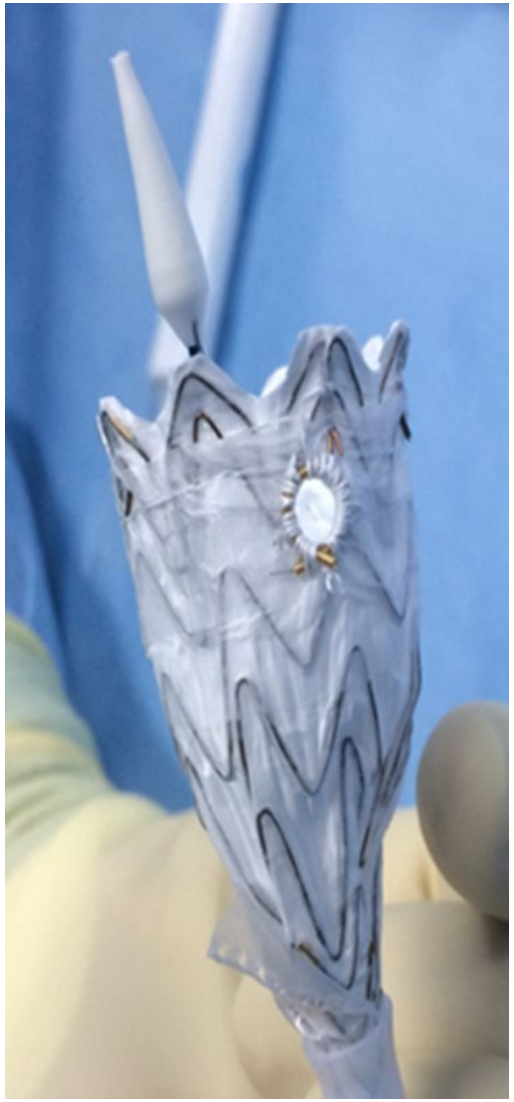


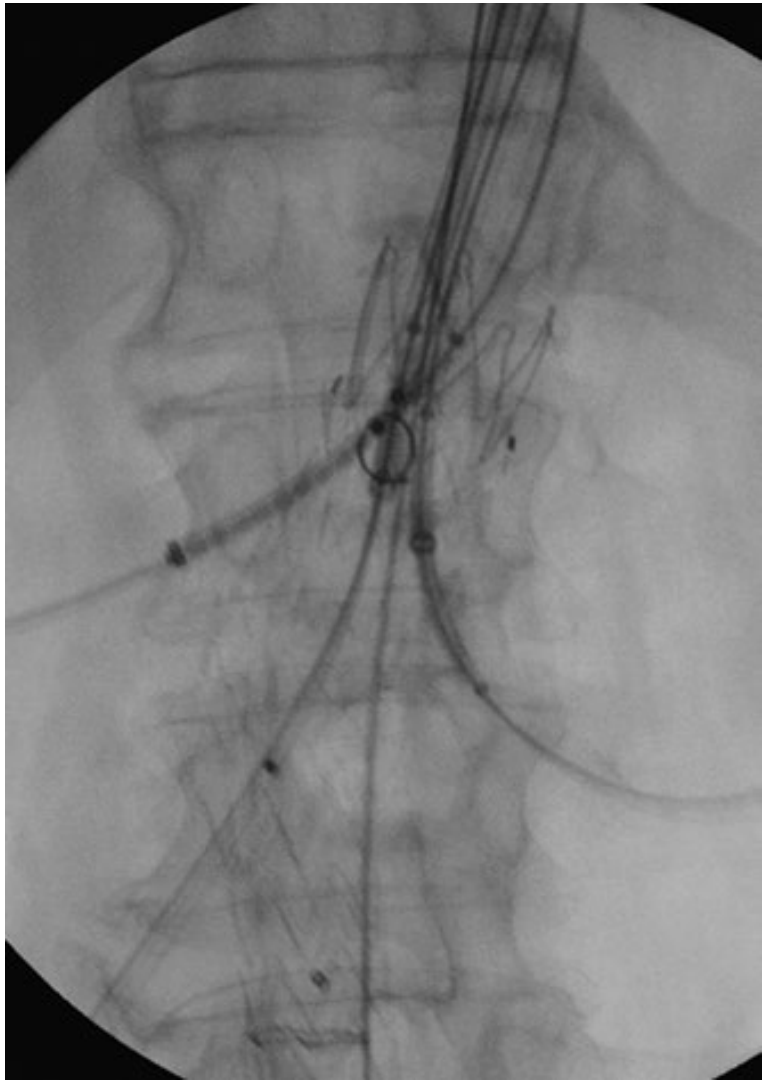




En urgence







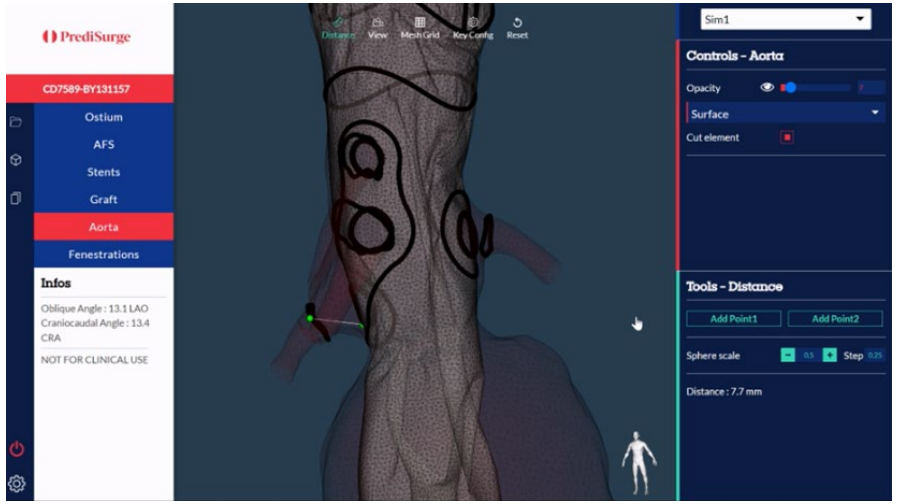
Conclusions

Chaque situation est unique

Chaque anatomie est différente

La stratégie / le choix de l'endoprothèse doit être personnalisée

Ce choix est aujourd'hui facilité par la simulation numérique



PrediSurge