Improved Fiberoptic Based Imaging With The FORS Lumiguide System:

Fiberoptic Sensors Within A Guidewire & A Special 3D Hub Allow Imaging Guidance With Any Catheter: How Does It Work And Experience

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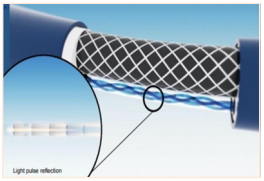
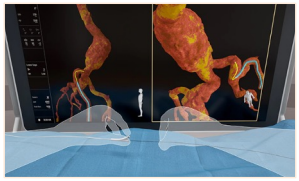
Disclosures

- Honoraria / Consultant / Research
  - Cook Medical Inc
  - W. L. Gore & Assoc
  - Philips Healthcare
- Some devices presented here are investigational and have not been approved by the FDA

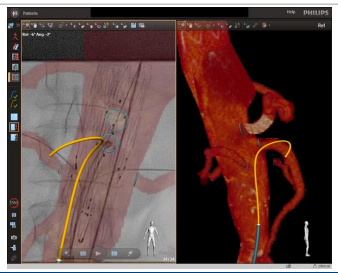
Fiber Optic RealShape (FORS)

- FORS: enables real-time 3D visualization of the full shape of devices inside the body, without the need for radiation





Fiber Optic RealShape (FORS)



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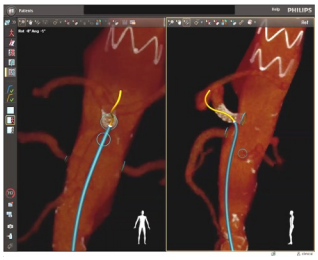

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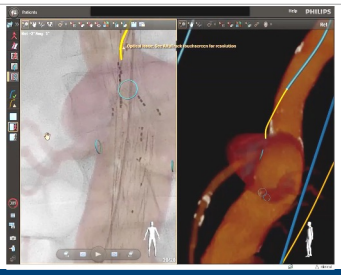

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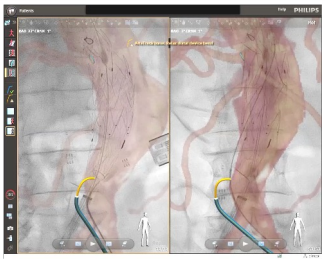

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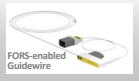
What is New?

LumiGuide, powered by FORS technology

LumiGuide equipment

FORS-enabled single-use devices



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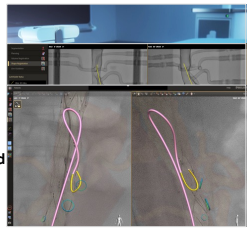
LumiGuide, *powered by FORS technology*

- Works with the catheters you're familiar with, thanks to **3D Hub**
- Has AI-based semi-automatic registration
- Visualizes tight bends such as SOS-like catheters and includes estimates for degraded sections



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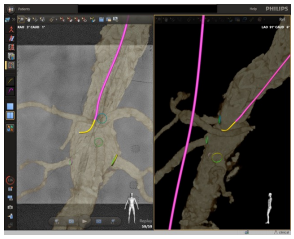
LumiGuide wire use in USA

Pending CE mark

- In body section from 120cm to 160cm
  - Better handling of tethered device
  - Support longer (up to 135cm) catheters



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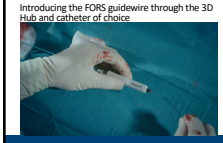
3D catheter agnostic guidance With LumiGuide

Connecting the 3D Hub to catheter of choice

Introducing the FORS guidewire through the 3D Hub and catheter of choice



Catheter selection and registration

3D Guidance for both FORS Guidewire and compatible Catheter

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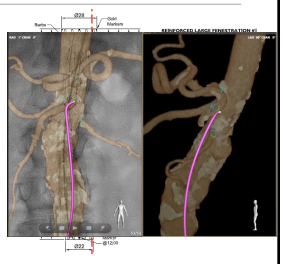
First experience with LumiGuide – 3D Hub

- 82yr old female with asymptomatic 51 mm complex AAA
- Planned for CMD 4 vessel
- TV were cannulated with FORS



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First experience with LumiGuide – 3D Hub

- 73yr old female with asymptomatic 55 mm complex AAA
- Planned for CMD 4 vessel
- TV were cannulated using LumiGuide and 3D Hub

TV cannulated with FORS using multiplanar visualization and minimum fluoroscopy

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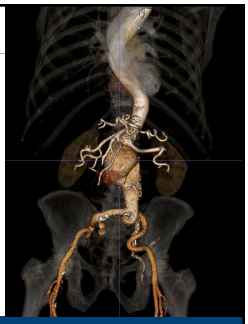
LumiGuide using UE access

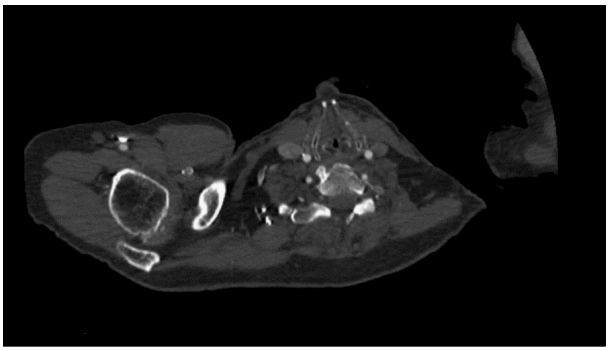
84-year-old male

Chief Complaint: Symptomatic 62 mm Juxtarenal aneurysm

Comorbidities: HTN, HLD and vertigo

Past medical history: No family history of aneurysm

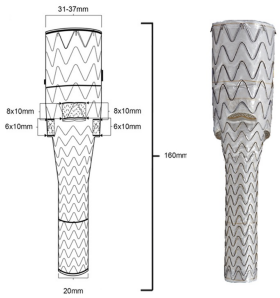


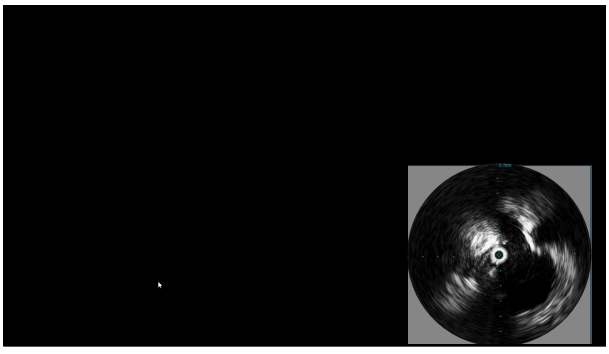


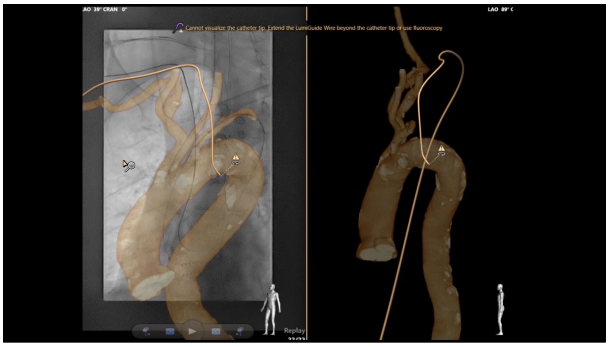
Type III Arch

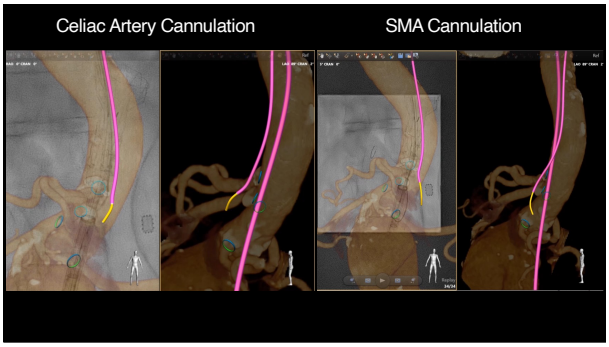
Treatment Plan

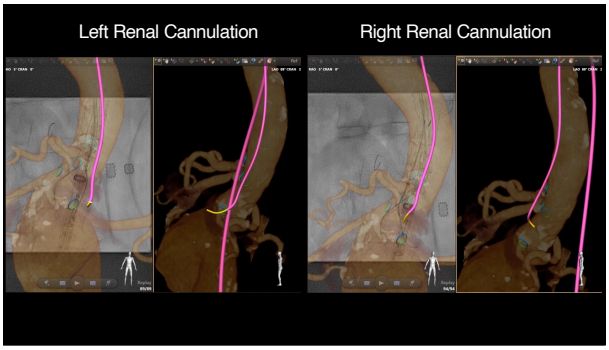
- Branched endovascular aortic aneurysm repair with the Gore® Excluder® Thoracoabdominal Branch Endoprosthesis (TAMBE)

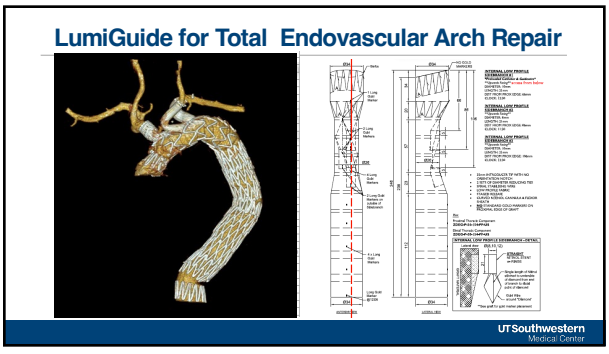







Celiac Artery Cannulation
SMA Cannulation


Left Renal Cannulation
Right Renal Cannulation


LumiGuide for Total Endovascular Arch Repair
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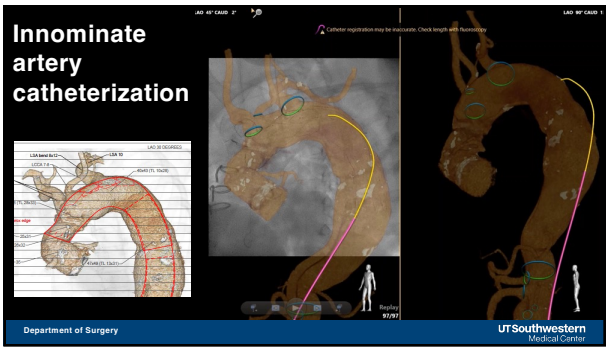
Innominate artery catheterization
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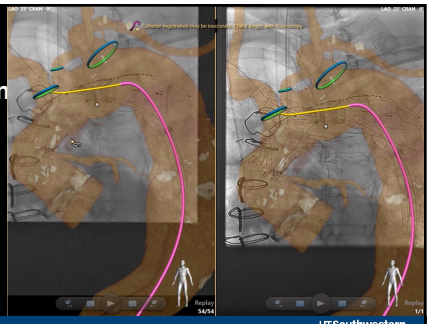
Carotid artery catheterization



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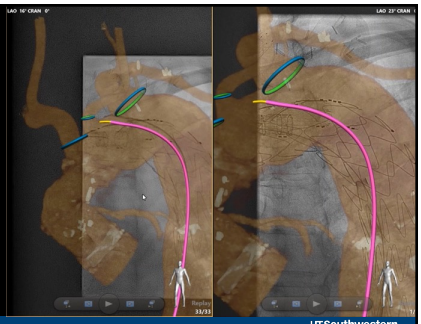
Left subclavian artery catheterization



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Early experience with LumiGuide

Variable	Procedure with FORS (n=39)
FORS cannulation technical success	81.7%
Total procedure duration, min	440
Fluoroscopy time, min	82.36
Total DAP, Gycm²	215.98
Total RAK, mGy	1661.02

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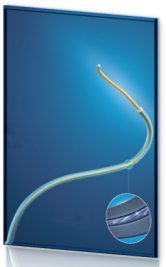
Conclusion

- FORS allows 3D multiplanar navigation with AI semi-automatic registration, which enhances target vessel catheterization with acceptable technical success and potentially reduced radiation
- LumiGuide allows the use of any catheter through both upper extremity and transfemoral access
- The 160-cm LumiGuide wire provides improved torqueability and navigation
- FORS is becoming a gamechanger for endovascular procedures due to the multiple benefits and applications



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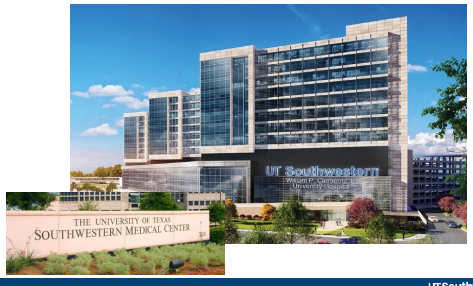

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