Fibre Optic RealShape (FORS) Technology: 3D Device Guidance in Practice

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Consultant: Cook Medical, Philips, Getinge, Terumo Aortic, Arterica, Medyria

Research-grants: Cook Medical, Philips, Terumo Aortic, Medtronic

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Speaking fees: Cook Medical, Philips, Getinge

Shares: Mokita-Medical, Arterica, Siemens, Philips

IP: Cook Medical, Terumo Aortic, Mokita Medical

Royalties: Cook Medical, Terumo Aortic
FORS Technology

- New Philips technology with CE-mark: two catheters and hydrophilic guidewire
- Embedded optical fiber enables real-time 3D visualization of the full shape of devices inside the body without the need for fluoroscopy
Hybrid Room - Set up Hamburg

Docking Base  Trolley  Control Room Interface
Casereport

- Male, 74y
- Prev. EVAR OSH 2003
- Myelodypl. syndrome, chron. Anemia, art. HT, DM
- Type I + II Endoleak
- Progess. diameter 4.5 – 7.5cm
Plan: Full Relining

[Diagram showing dimensions and annotations for relining process]

Ipsilateral Leg Extension
ZISL-20-93

Contralateral Leg Extension
ZISL-11-59
ZISL-20-76
Casereport
Demonstrating 3D device guidance through a recorded case

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Powered by Fiber Optic RealShape technology
Postoperative Course

- Fluorotime: 33min
- OR-time: 168min
- Contrastvolume: 87ml
- DAP: 175 Gycm²
  - Fluoro: 57 Gycm²
  - DSA: 118 Gycm²
- Uneventful recovery
- Two days IMC for SCI-monitoring
- Discharge p.o. day 6
- FU-plan: 1y CTA
Conclusions

- FORS technology allows reliable 3D navigation by visualizing catheters and guidewires in full shape using laser light.
- High potential for reduction of radiation and workflow-improvement by intuitive virtual biplane visualization.
- Revolutionary new tool on the horizon.