New GORE® VIABAHN® VBX Balloon Expandable Endoprosthesis:

Case experience in aortic disease

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Head: Univ.- Prof. Dr. G. Torsello
VBX®: Case experience in aortic disease

Disclosures:

Consulting Gore, Medtronic Proctor Cook™ Company

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Senior consultant and
Leader of section „endovascular aortic therapy“
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FEVAR

BEVAR

T-BRANCH

CHEVAR
Durability of FEVAR, CHEVAR and BEVAR is strongly associated with the performance of the bridging devices.

No covered stent has been designed specifically for this application!
Durability of FEVAR, CHEVAR and BEVAR is strongly associated with the performance of the bridging devices.

Failure modes of BSG:
TAAA-BEVAR: Relined BE-BSG LRA: Occlusion after 1Y

Kinking behind the BSG

Shrinking of aneurysm
The Ideal Bridging stent attributes should include the followings:

- Cover the distance between the main body and the target vessel (many length options)
- Good visibility during implantation
- Respect the angulation of the target vessel (flexibility)
- Durable and flexible after flaring, during the cardiac cycles, the diaphragm movements and after aortic remodelling
- High radial forces and resistance to compression (calcified ostium, CHEVAR)
- Stent retention during navigation
- High trackability of the delivery system
- Wide range of sizing and oversizing
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GORE® VIABAHN® VBX Balloon
Expandable Endoprosthesis
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Technology:

**Independent stainless steel rings**
- Independent rings for flexibility and conformability
- Minimizes foreshortening
- Provides high radial strength

**Highly flexible stent and catheter**
- Enables contralateral deployment
- Enables implanted conformability

**Ultrathin balloon cover**
- Improves stent retention and deliverability

**Semi-compliant covered balloon**
- Enables diameter customization

**CBAS Heparin Surface**
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### Configurations:

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<tr>
<th>Stent Labeled / Nominal Diameter (mm)</th>
<th>Crimped Stent Length (mm)</th>
<th>Introducer Sheath Size (Fr)</th>
<th>Maximum Post-dilated Stent Diameter (mm)*</th>
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Case 1: male, 69Y., CAD, COPD

Aortic aneurysm segm. 4 after OR of abd. aneurysm
Case 1: male, 69Y.

Placement of the branched endograft and closure of the femoral access (avoids SCI)
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Case 1: male, 69Y. - Bridging SMA
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Case 1: male, 69Y. - bridging RRA
Case 1: male, 69Y.

Before

After
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Case 1: male, 69Y. - CT-reconstruction
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Case 2: male, 67Y., CAD, heart insufficiency, single kidney left side, hostile abdomen

Symptomatic 1a EL after EVAR
Case 2: male, 67Y. CHEVAR with VBX LRA
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Case 2: male, 67Y.

CT-reconstruction: VBX as Chimney-stent
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Case 2: male, 67Y.

Before

After
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Case 3: male, 72Y., CAD-MI2008, COPD

Thorakoabdominal aneurysm Type Crawford 4
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Case 3: male, 72Y., CAD-MI2008, COPD
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Case 3: male, 72Y., CAD-MI2008, COPD

Before

After
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Flaired VBX in a fenestration

(Keyence VHX 6000 Digital Microscope)
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Flaired VBX in a fenestration

Radiological analysis in two planes for detecting stent fractures
Conclusion:

Durability of FEVAR, CHEVAR and BEVAR is strongly associated with the performance of the bridging devices.

Until now, a balloon expandable stent graft has not been designed specifically for these applications. VBX has been designed with complex EVAR applications in mind (desirable attributes).

Clinical data reporting vbx outcomes in these applications are awaited.

We have very limited experience across these applications but the first cases have demonstrated favorable procedural results.
Thank you and best regards from Münster!

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