Update on the global Endurant experience: Lessons learned from the 4-year results of the ENGAGE Registry

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Disclosure
Marc RHM van Sambeek
I have the following potential conflicts of interest to report:
Consulting and speakers fee
WL Gore & Associates
Medtronic
Unrestricted research grants
Medtronic
WL. Gore & Associates
Abbott Vascular
Philips Medical Systems

Baseline demographics

ENGAGE challenging/real world population

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<tr>
<td>Age (year, mean ± SD)</td>
<td>73.1 ± 8.1</td>
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<tr>
<td>Gender (male, %)</td>
<td>89.5% (1130/1263)</td>
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<td>Max AAA size (mm)</td>
<td>60.3 ± 11.6</td>
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<td>Tobacco use</td>
<td>49.3% (608/1233)</td>
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<td>Hypertension</td>
<td>75.4% (940/1246)</td>
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<tr>
<td>Hyperlipidemia</td>
<td>60.6% (721/1190)</td>
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<td>Diabetes</td>
<td>19.0% (236/1245)</td>
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<td>Cancer</td>
<td>20.5% (254/1242)</td>
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<td>Family history of aneurysms</td>
<td>6.8% (86/1262)</td>
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<td>Cardiac disease</td>
<td>53.7% (678/1263)</td>
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A challenging population

High quality registry data
Intra-operative Clinical Success
- Technical Success: 99.0% (251/255)
- Freedom from intra-operative death: 100.0% (212/212)
- Freedom from type III Endoleak (uncorrected): 98.6% (212/212)

Technical Success 99.0% (251/255)

Freedom from all-cause mortality and AAA-related mortality

Typical follow up results of elderly CVD patients

Endurant is Technically and Clinically Successful

Endurant is technically and clinically successful with Freedom from all-cause mortality and AAA-related mortality

Treatment outcomes

Low rates of conversion to open surgery and incidence of rupture

Conversion to open surgery
0-365 days: 0.6% (15/2358)
0-731 days: 0.8% (15/1933)
0-1096 days: 0.9% (15/1733)
0-1461 days: 1.1% (15/1333)

Rupture
0-365 days: 0.2% (15/2358)
0-731 days: 0.3% (15/1933)
0-1096 days: 0.5% (15/1733)
0-1461 days: 0.9% (15/1333)

Endurant is low aneurysm, device- and procedure-related mortality

Durability markers

Endurant seals well and prevents type I or III endoleak even in challenging anatomies

Freedom from all-cause mortality
At 1 month: 74.1% (175/237)
At 2 years: 98.3% (208/213)
At 3 years: 97.7% (208/213)
At 4 years: 98.2% (208/213)

Freedom from AAA-related mortality
At 1 month: 98.6% (208/213)
At 2 years: 100.0% (208/208)
At 3 years: 97.6% (208/213)
At 4 years: 98.3% (208/213)
Proven durability:

- Very low incidence of body device migrations
- Low rates of endoleak, both overall (9.5%) and type IA endoleak (0.8%)
- 89.2% of AAA sacs stable or decreasing in size

Freedom from 2nd procedures is 87.1%, most 2nd procedures occur in the 1st year.

4 year data from ENGAGE demonstrates encouraging midterm results.

Extend ENGAGE FU to 10 yrs to support it’s foundation as standard of care.