AAAs With Short (8-15 mm) Necks Are Best Treated With Standard EVAR Using Newer Endograft Devices

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Disclosures
Consultant
- Medtronic
- WL Gore
- Philips
- Endologix

Debates on 8-15 mm necks

As a Cleveland specialist, he needs a niche

- It’s his professional right of existence
- He needs large number of specific treatments
- Referrals are key!

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- He’ll tell everybody how difficult and complicated that treatment is and how good he is in it
- He’ll do everything to restrict the treatment to as few hospitals as possible
- He adjusts indications to scrape more patients
As a Cleveland specialist, he needs a niche

In Europe, things are a bit different

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• FEVAR is widely available
• No sensible surgeon would treat a 8-15 mm neck AAA by FEVAR
• And there’s a good reason for that......

Cost-Effective?

• We can barely get EVAR to be cost-effective
• FEVAR will never ever be cost-effective
  – Cost-prohibitive
    • FEVAR: €33,191 vs. OS: € 14,661 (p<0.0001) *
  – Potential waste of resources

Cost-Effective?

The ultimate question remains:

• Do we really need these fancy devices for 8-15 mm necks?
• Is the performance of newer standard EVAR devices satisfactory?
**ENGAGE Global Registry**

Study Sponsor - Medtronic

Largest Contemporary EVAR Registry with single manufacturer’s stent graft

1263 Patients  
30 Countries  
6 Continents  
Real world patients: Limited inclusion/exclusion criteria  
Real world practice: Limited procedural specifications - Standard follow-up

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**ENGAGE Global Registry**

Study Sub-Analysis

- To compare 4-Y results in patients having different neck lengths treated with Endurant SG.

**Hypothesis:**

- Endurant performs as well in short necks (8-15 mm) as it does in standard length necks (≥15 mm)

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**ENGAGE Global Registry**

Initial Implant

<table>
<thead>
<tr>
<th>Technical Observation</th>
<th>8-15 mm</th>
<th>≥15 mm</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Successful Delivery and Deployment</td>
<td>99.6% (137/137)</td>
<td>96.4% (1096/1100)</td>
<td>0.35</td>
</tr>
<tr>
<td>Type I Endoleak (uncorrected)</td>
<td>0.0%</td>
<td>1.3%</td>
<td>0.18</td>
</tr>
</tbody>
</table>

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**ENGAGE Global Registry**

Outcomes At Follow-Up

<table>
<thead>
<tr>
<th>Endoleak Type IA</th>
<th>8-15 mm</th>
<th>≥15 mm</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>At 1 yr</td>
<td>0.0% (0/137)</td>
<td>0.2% (2/1100)</td>
<td>0.35</td>
</tr>
<tr>
<td>At 2 yr</td>
<td>0.0% (0/137)</td>
<td>0.4% (4/1100)</td>
<td>0.54</td>
</tr>
<tr>
<td>At 3 yr</td>
<td>1.7% (2/137)</td>
<td>0.5% (6/1100)</td>
<td>0.29</td>
</tr>
</tbody>
</table>

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**ENGAGE Global Registry**

Outcomes Through Follow-Up

<table>
<thead>
<tr>
<th>Secondary Procedure</th>
<th>8-15 mm</th>
<th>≥15 mm</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Through 1 yr</td>
<td>6.6% (9/137)</td>
<td>5.9% (65/1100)</td>
<td>0.61</td>
</tr>
<tr>
<td>Through 2 yr</td>
<td>7.3% (10/137)</td>
<td>7.8% (84/1100)</td>
<td>0.91</td>
</tr>
<tr>
<td>Through 3 yr</td>
<td>10.1% (13/129)</td>
<td>11.0% (118/1076)</td>
<td>0.76</td>
</tr>
</tbody>
</table>

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**ENGAGE Global Registry**

Outcomes Through Follow-Up

<table>
<thead>
<tr>
<th>Conversion to OS</th>
<th>8-15 mm</th>
<th>≥15 mm</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Through 1 yr</td>
<td>0.7% (1/137)</td>
<td>0.6% (7/1100)</td>
<td>0.91</td>
</tr>
<tr>
<td>Through 2 yr</td>
<td>0.7% (1/137)</td>
<td>0.8% (9/1100)</td>
<td>0.45</td>
</tr>
<tr>
<td>Through 3 yr</td>
<td>1.6% (2/129)</td>
<td>1.0% (118/1076)</td>
<td>0.58</td>
</tr>
</tbody>
</table>
### ENGAGE Global Registry
#### Outcomes Through Follow-Up

<table>
<thead>
<tr>
<th>Rupture</th>
<th>6-15 mm</th>
<th>≥15 mm</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Through 1yr</td>
<td>0.7% (1/137)</td>
<td>0.1% (1/1100)</td>
<td>0.08</td>
</tr>
<tr>
<td>Through 2yr</td>
<td>0.7% (1/137)</td>
<td>0.4% (4/1100)</td>
<td>0.37</td>
</tr>
<tr>
<td>Through 3yr</td>
<td>2.3% (3/129)</td>
<td>0.7% (8/1076)</td>
<td>0.07</td>
</tr>
</tbody>
</table>

### ENGAGE Global Registry
#### Summary

Up to 4 years:

Endurant performs equally well in standard EVAR neck lengths as it does in short necks.

### Conclusion

- AAAs with straight short necks (8-15 mm) should be treated with standard endografts.
- Using fenestrated technology in these cases is a huge waste of resources.

### Serious accusation

No significant difference

### Serious career change

Serious career change