DEBATE: Not So : Other Data Including A Meta-Analysis Indicates That We Still Need An RCT Versus Open Repair To Determine The Best Treatment For Juxta- And Pararenal AAAs

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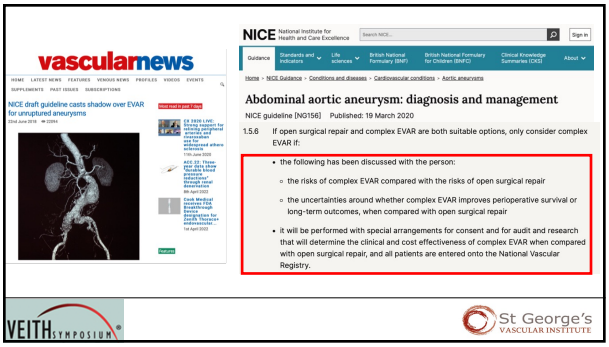
Disclosure

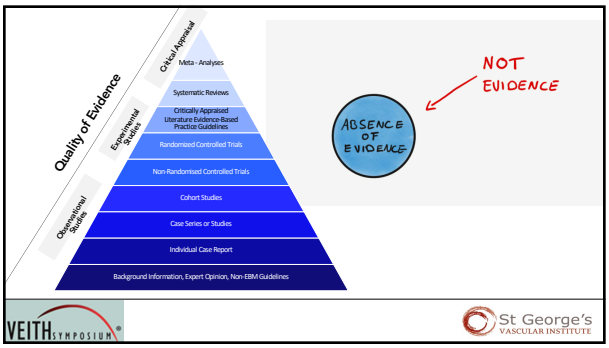
- Consultancy/Speaker: Medtronic, Artivion, Gore, Endologix

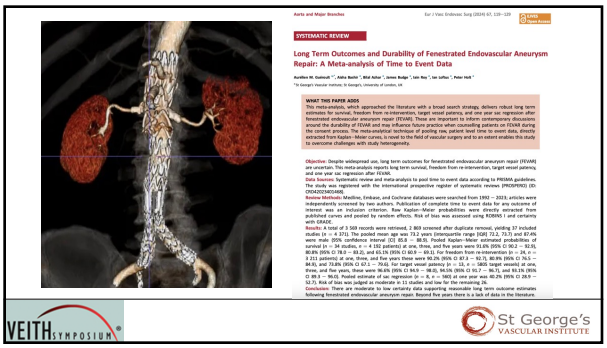


Complex Aneurysms: 2024 Guidelines

Recommendation 120 (Changed)	Class	Level
...standard surgical risk, open or endovascular repair **should be considered** based on patient fitness, anatomy, and patient preference.	IIa	C

Recommendation 121 (Changed)	Class	Level
...high surgical risk, endovascular repair with fenestrated and branched technologies **should be considered** as first line therapy.	IIa	C





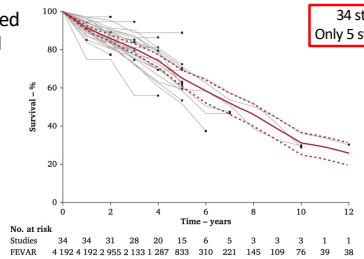
Long Term FEVAR Outcomes: Aims & Methods

- Meta-analytical technique to pool Kaplan-Meier estimates for outcomes of interest (1992-2023)
- Overcome issues of variability in study design, data quality and bias
- Extract raw pooled data from survival curves
- ROBINS I tool for quality/bias
- Report robust estimates for long term outcomes with GRADE Certainty assessment

4009 records
4,371 patients from 37 studies

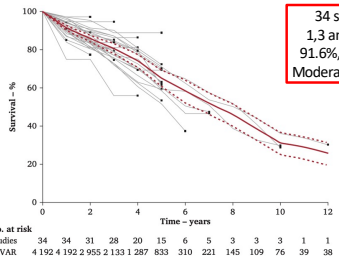
	Median
Study size	96
Median year of data collection	2010
Follow up in months	26

Estimated Survival



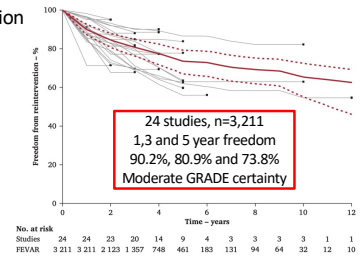
34 studies, n=4,192
Only 5 studies past 5 years

Estimated Survival



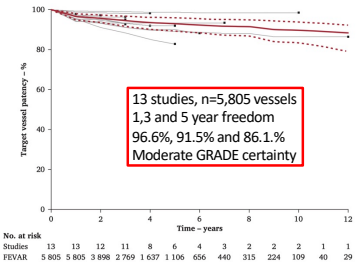
34 studies, n=4,192
1,3 and 5 year survival
91.6%, 80.8% and 65.1%
Moderate GRADE certainty

Reintervention



24 studies, n=3,211
1,3 and 5 year freedom
90.2%, 80.9% and 73.8%
Moderate GRADE certainty

Patency



13 studies, n=5,805 vessels
1,3 and 5 year freedom
96.6%, 91.5% and 86.1%
Moderate GRADE certainty

Aneurysm Sac Behaviour

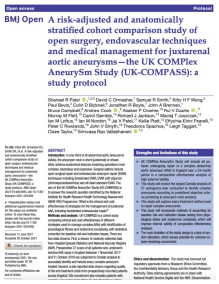
- 8 studies (n=560) reported sac regression
  - 1 and 2 year data
  - 40.2 and 59.0%
  - Very low GRADE certainty

US IDE Aortic Research Consortium "pushes the envelope" on fenestrated and branched procedures

14th January 2022 10928

Andres Schanzer at Critical Issues 2021

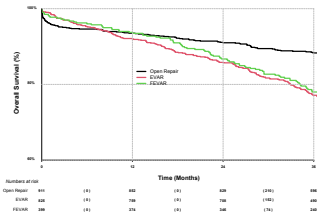
- Selective centres/cases
- >20% 3-year mortality
- ~40% 5-year mortality
- Absence of sac regression >40%
- Data on all reinterventions and endoleaks
- No data on cost effectiveness

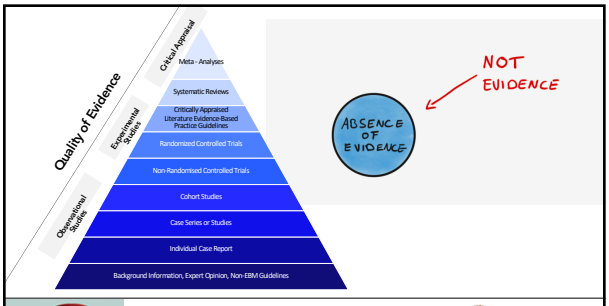


BMJ Open

A risk-adjusted and anatomically stratified cohort comparison study of open surgery, endovascular techniques and medical management for juxtarenal aortic aneurysms—the UK COMPlex AneurySm Study (UK-COMPASS): a study protocol

UK-COMPASS: n=2,202, 3 Year Mortality





Summary

- There are moderate to low certainty data supporting long term outcome estimates after FEVAR
- There is a paucity of mature long-term data, especially sac behaviour
- There are few robust comparative data
- Registry style data will always have flaws and be subject to bias
- We need a randomized controlled trial