



How to Improve Outcomes? Insights from UK-COMPASS Corelab

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Comparison of Open Surgery and Endovascular Techniques for Juxtarenal and Complex Neck Aortic Aneurysms: The UK COMPLEX Aneurysm Study (UK-COMPASS) — Peri-operative and Midterm Outcomes

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Open access

Protocol

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

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Cases coded as AAA repair in England (2017-2019) (n = 8 994)

CT scans retrieved to the corelab (n = 8 706)

CT scans analysed in the corelab (n = 8 612)

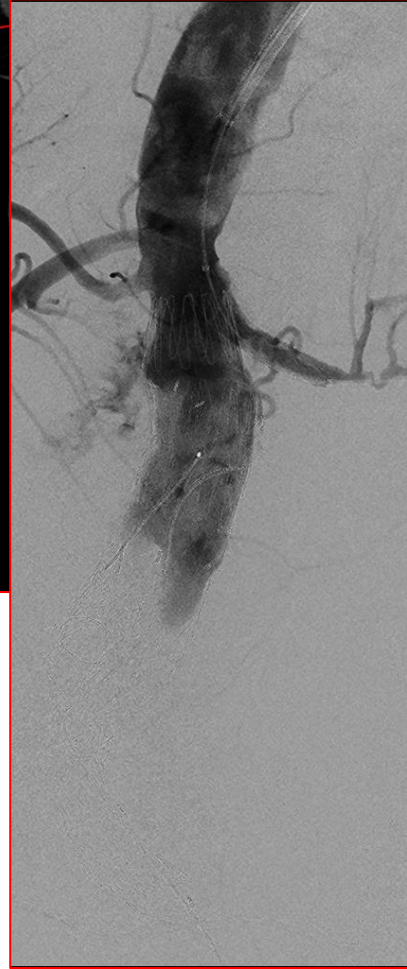
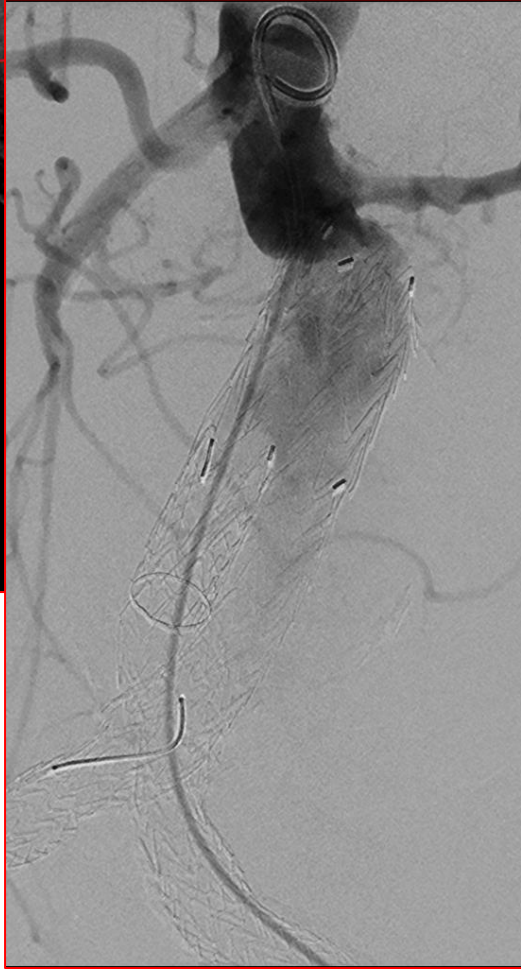
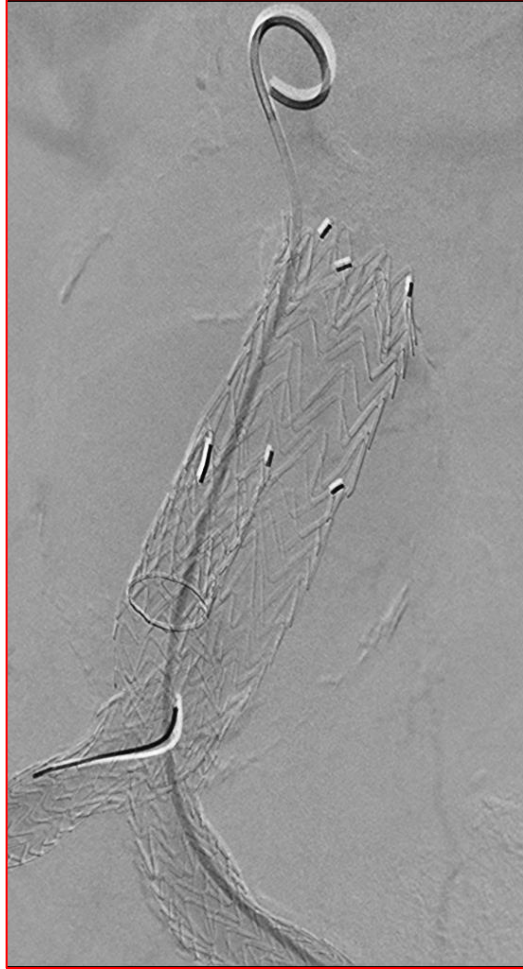
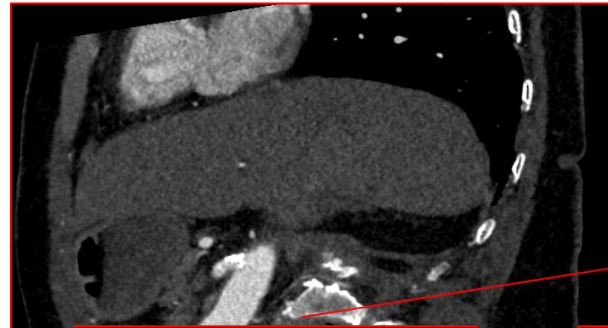
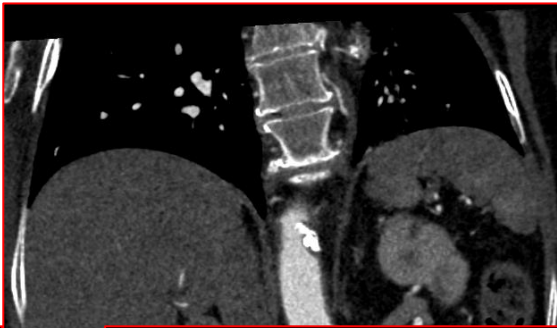
Total cases meeting anatomical study criteria (n = 2 757)

CT scans not analysed
Inappropriate scan or poor quality (n = 94)

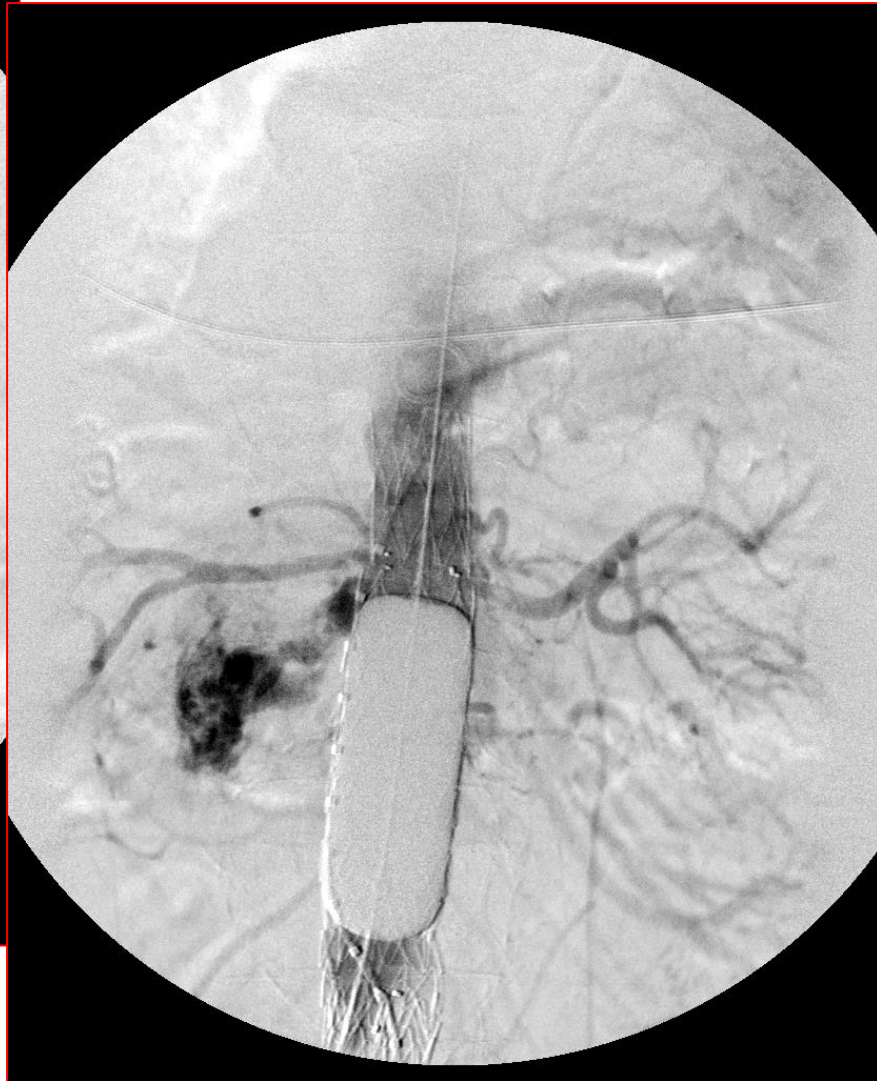
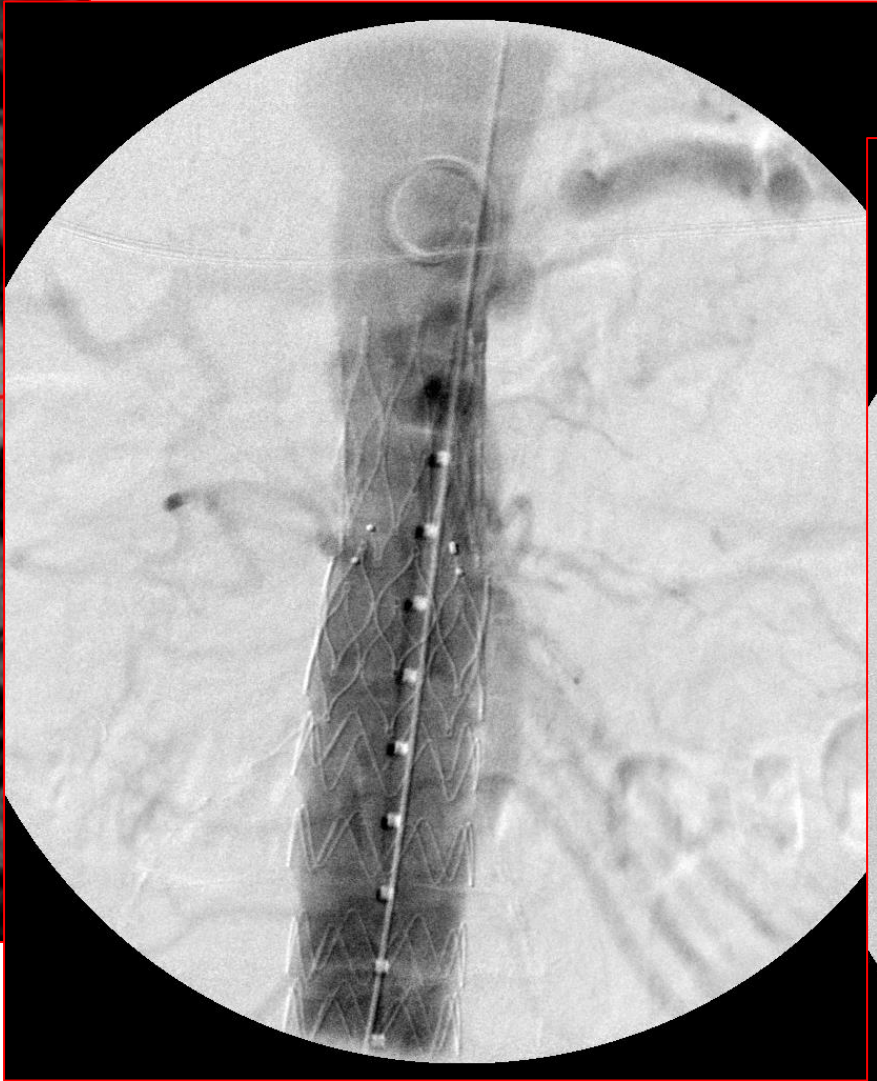
Reasons for exclusion
Standard infrarenal AAA (n = 3 045)
Iliac aneurysm only (n = 256)
Thoracic/TAAA/visceral aortic aneurysm (n = 597)
Re-intervention to a previous AAA repair (n = 526)
Saccular and/or subthreshold AAA (n = 218)
Rupture/emergency presentation (n = 382)
Other unrelated pathology (n = 150)
Ambiguous neck (n = 663)
Not possible to confirm treatment method (n = 18)

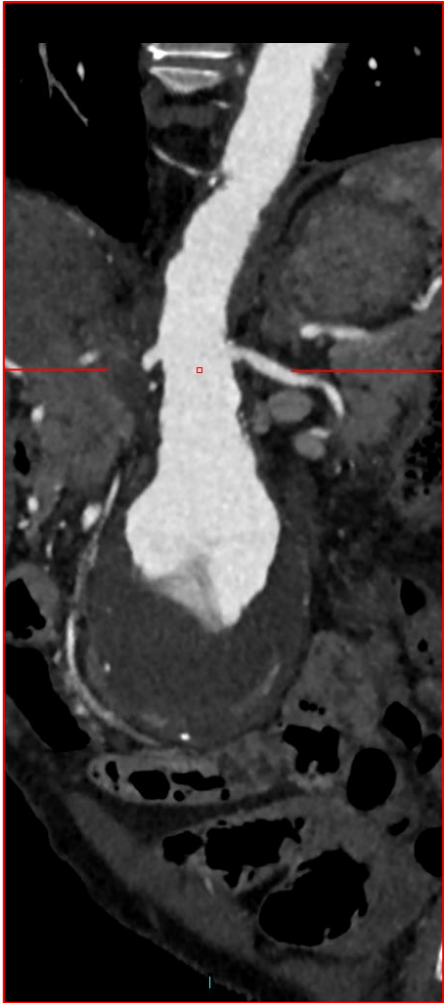
Off-label EVAR and Type 1a Endoleak on Completion

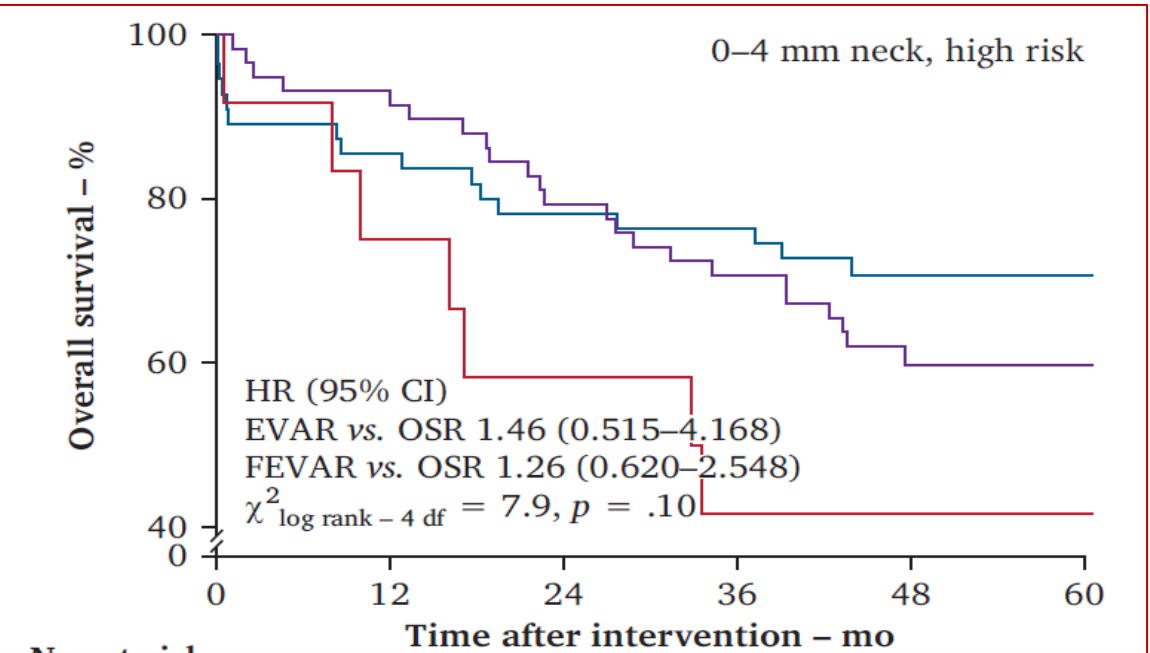
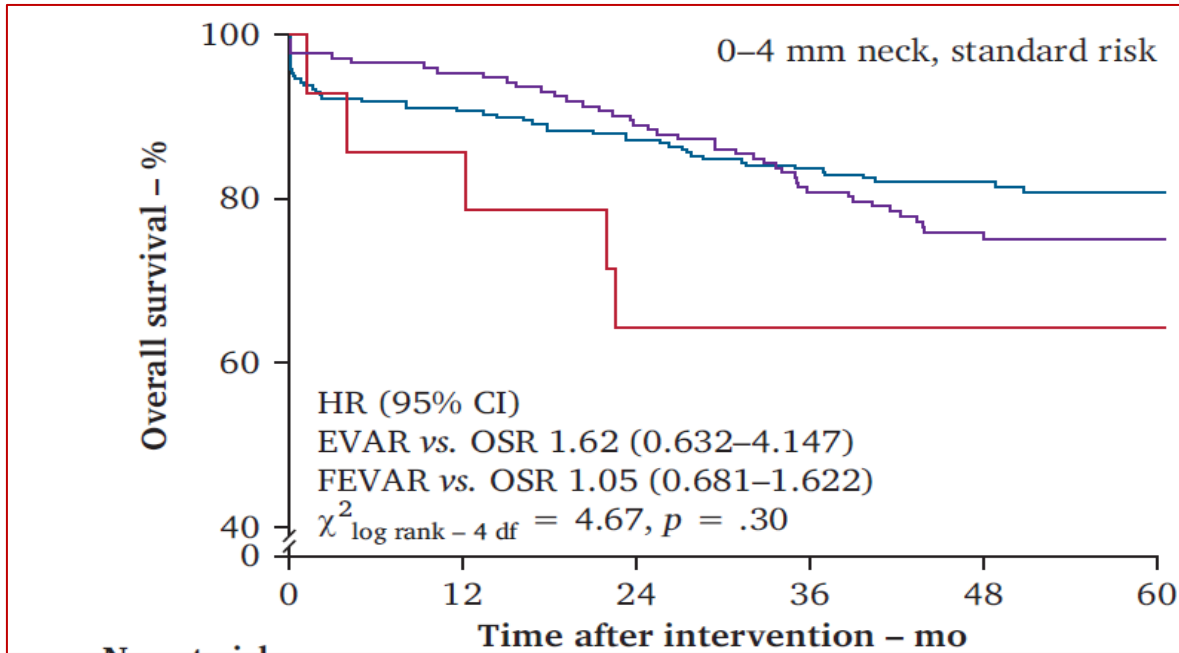
	Neck length		
	0-4mm	5-9mm	≥10mm
Off-label EVAR use	7%	32%	60%
Type 1a endoleak on completion			
Off-label EVAR (n=1388)	21.9% (7/32)	20.7% (28/135)	23.9% (292/1221)
EVAR + Adjuncts (n=143)	25% (4/20)	25.8% (8/31)	26.1% (24/92)











Aneurysm related Mortality

- OSR: 1.3%
- FEVAR: 1.3%
- Off-label EVAR: 11.5%

Summary

- Beware of off-label standard EVAR
- Not a defensible option in very short necks
- Neck angulation, thrombus-lining and calcification mean trouble

Inaugural edition

Critical Issues - UK

Manchester 27-28 Feb 2025