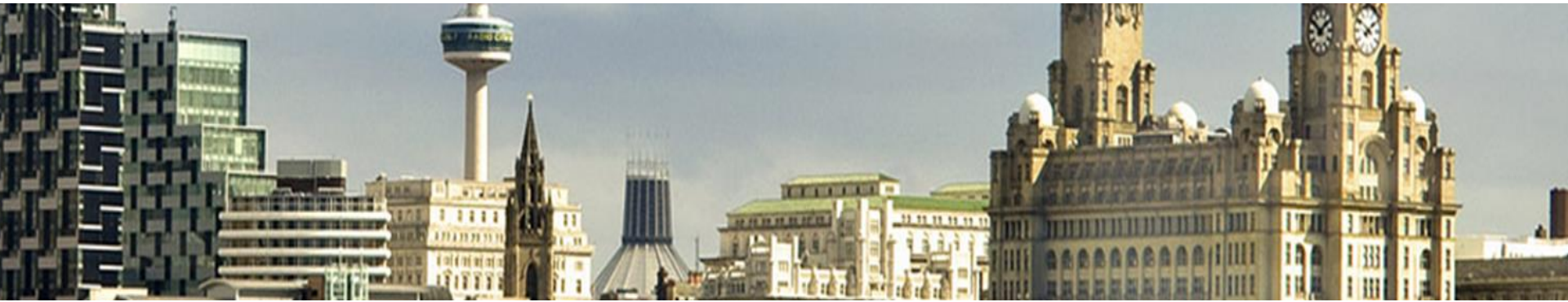


EVAS and chEVAS will replace EVAR and FEVAR



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Disclosure of interest



Professional fees
Educational grants
Research grant

Levels of evidence

- I Evidence obtained from at least one properly designed RCT
- II-1 Evidence obtained from well-designed controlled trials without randomization
- II-2 Evidence obtained from well-designed cohort or case-control analytic studies
- II-3 Evidence obtained from multiple time series designs
- III Opinions of respected authorities

There is no comparative evidence for EVAR vs EVAS or FEVAR vs chEVAS

Will EVAS and chEVAS replace EVAR and FEVAR?

Place your €100 bets

ODDS 10:1

- No comparative data
- No EVAS long term data
- No chEVAS long term data
- (Some) FEVAR long term data



Will EVAS and chEVAS replace EVAR and FEVAR?

Place your €100 bets

ODDS 100:1

- No comparative data
- No EVAS long term data
- No chEVAS long term data
- (Some) FEVAR long term data



My argument

EVAR is an imperfect technique, which has reached its full potential

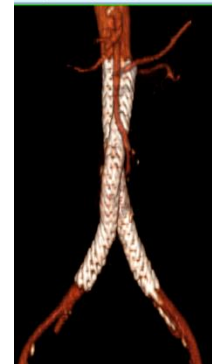
FEVAR is a complex, flawed technique, which benefits few patients

EVAS/chEVAS is the only endovascular alternative to EVAR/FEVAR

Results of EVAS/chEVAS suggest you should place your bet NOW!



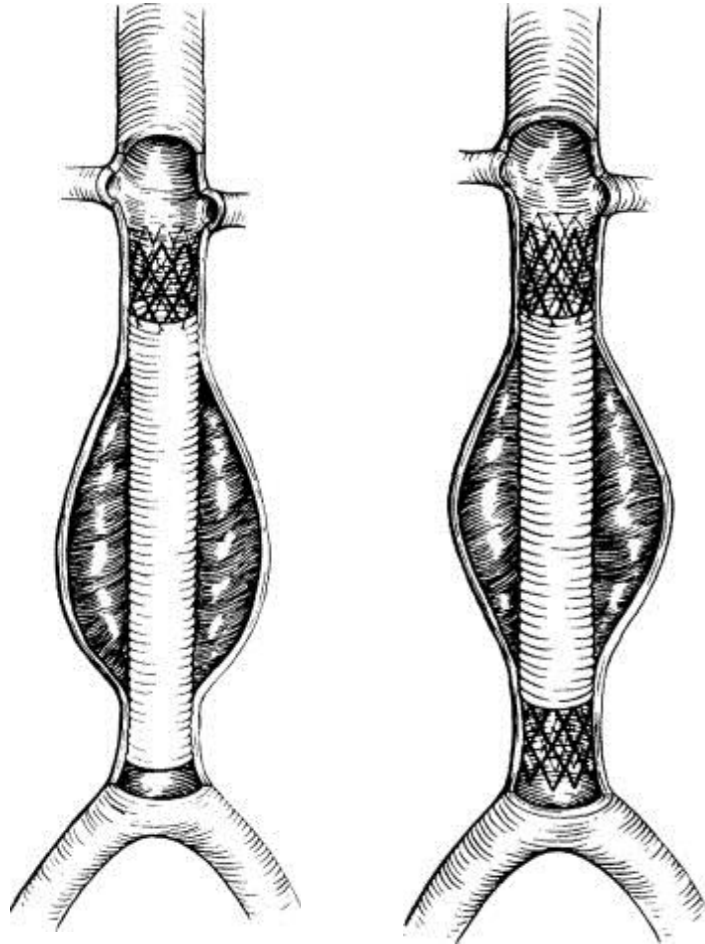
VS



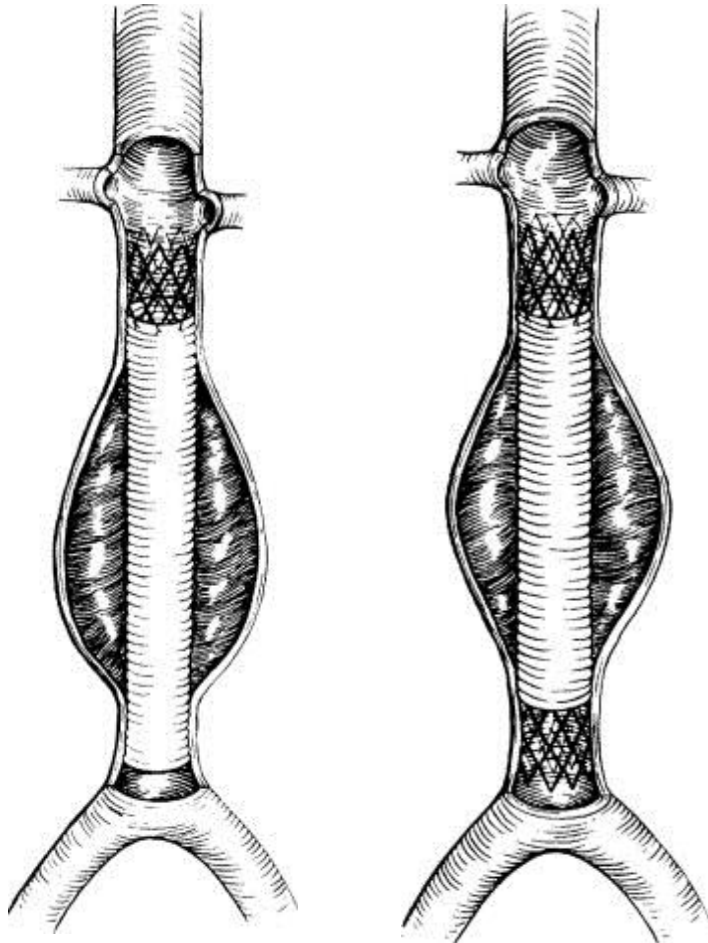
VS



Does anybody recognise these pictures?



Does anybody recognise these pictures?



Same principle as current EVAR

Same implantation technique

Marginal gains over time
stent design
technique
imaging
patient selection

The concept has not changed

Problems with EVAR

Increased life expectancy¹

Higher long term mortality
than open repair²

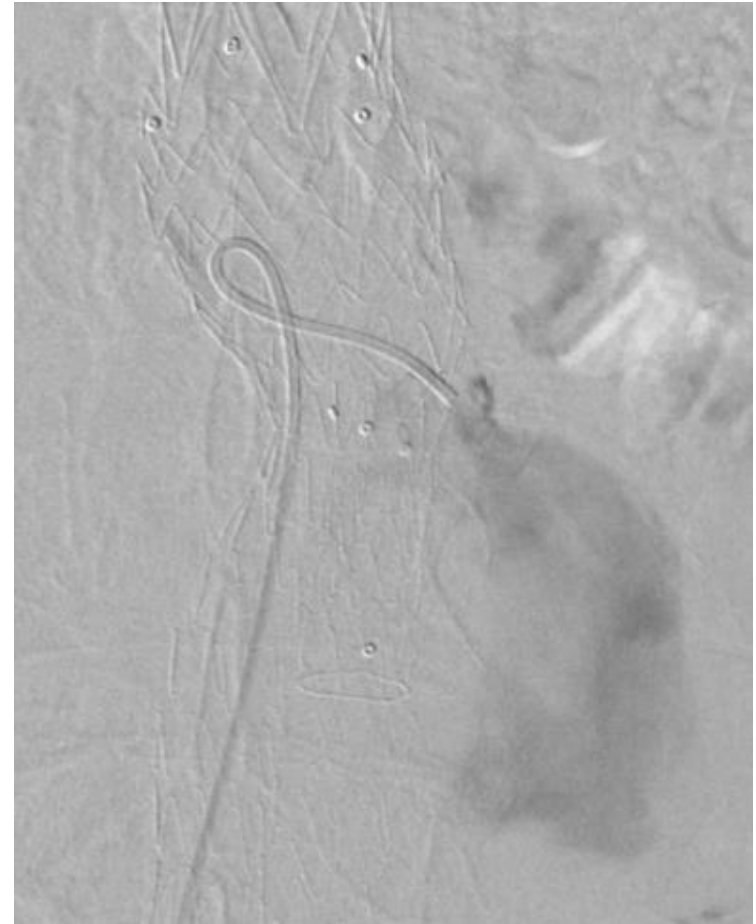
Late failure due to concept, not
technique or materials



¹Office of National Statistics. *National Life Tables – UK.*

²Patel et al., *Charing Cross International Symposium*, 27th April 2017

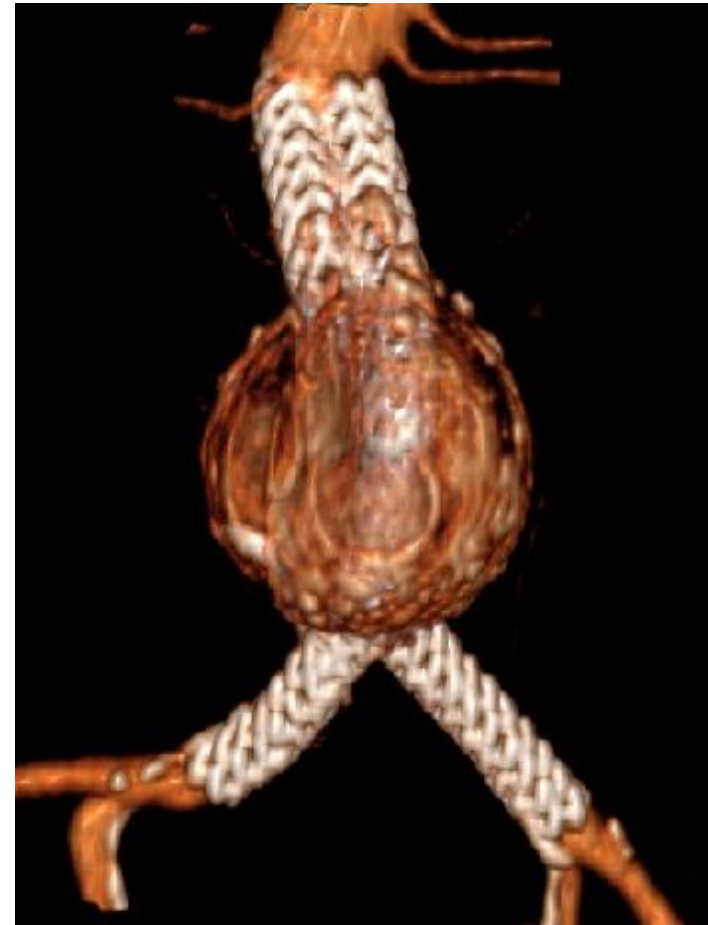
Why does EVAR fail?



EVAS

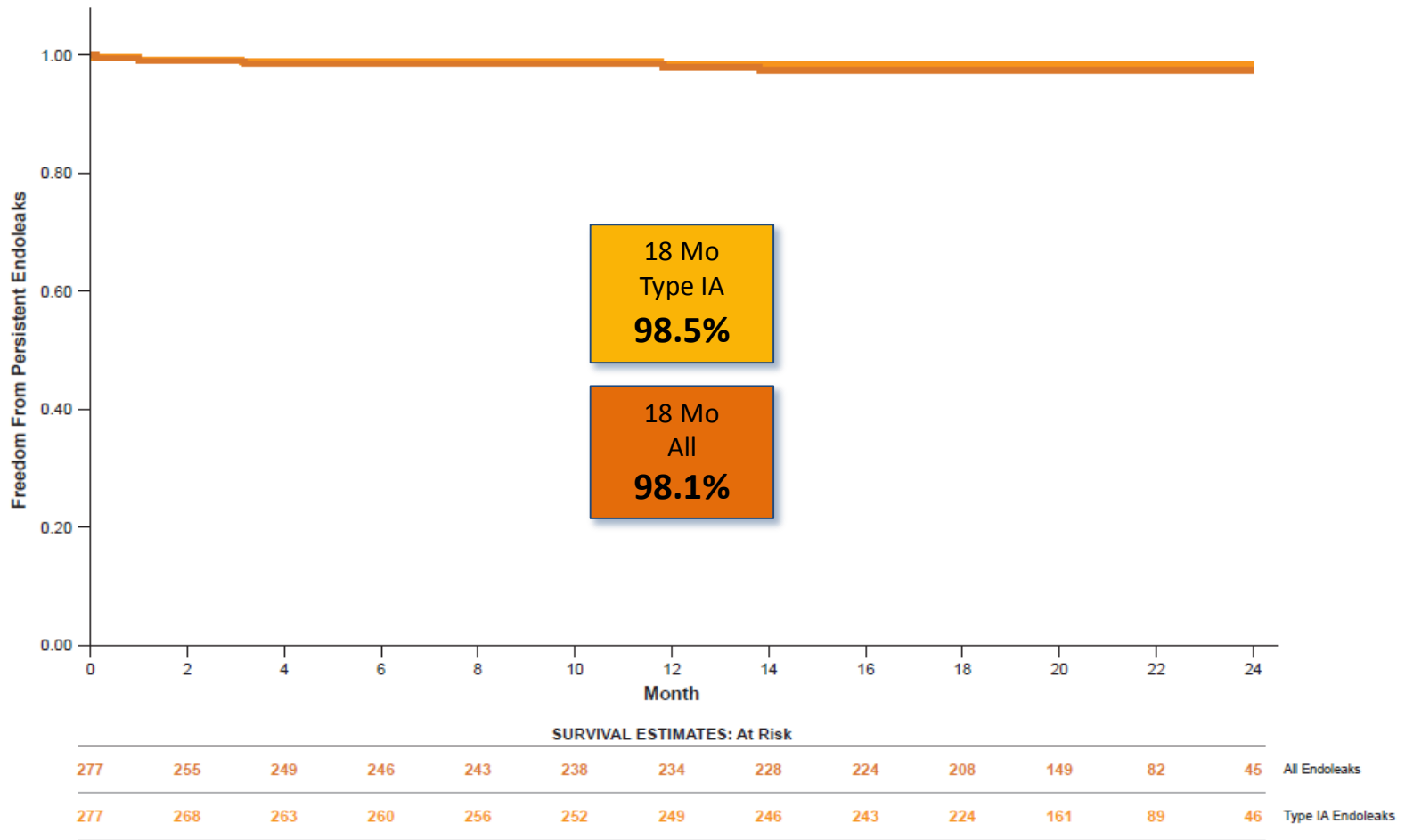
No space for endoleaks

No modularity



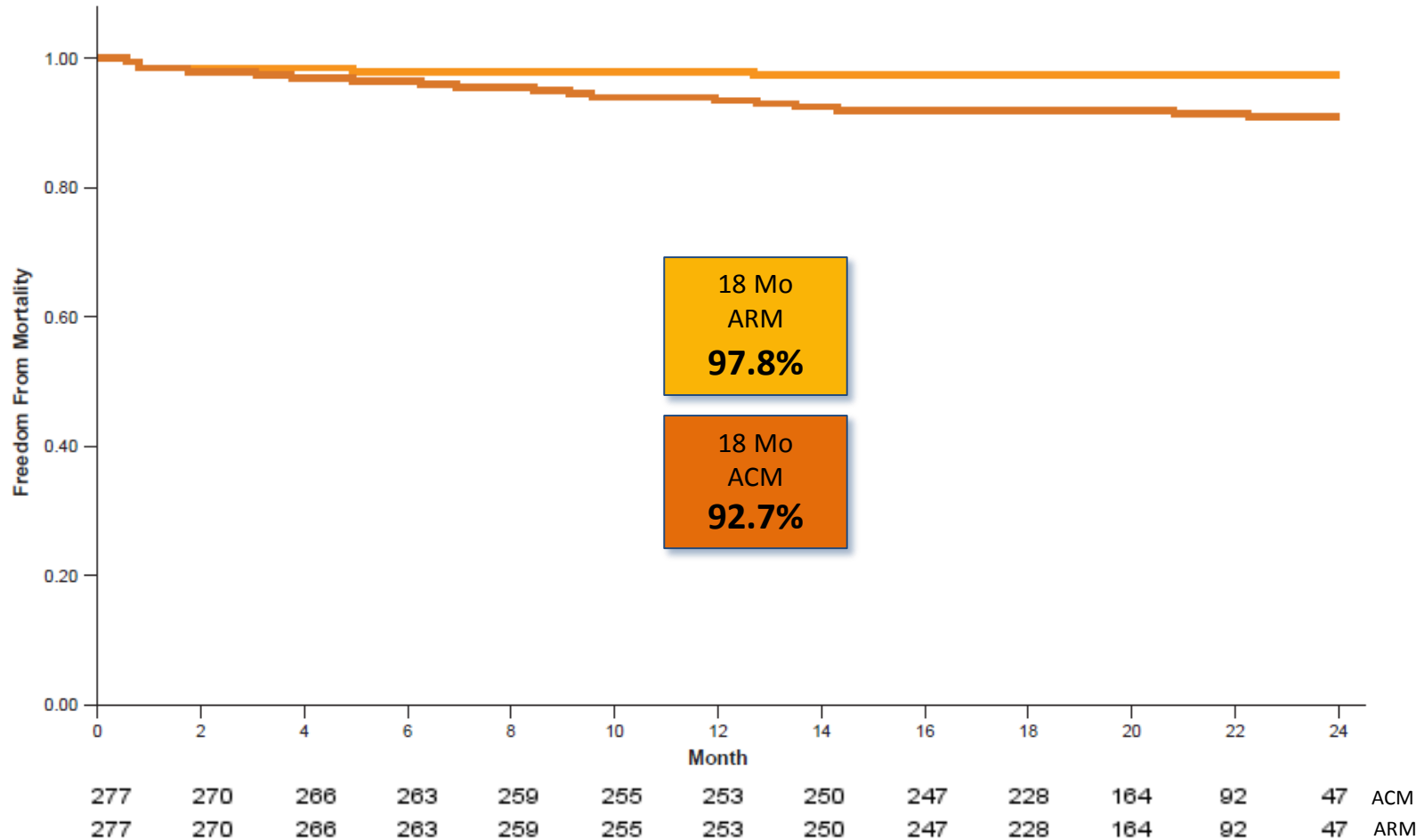
The EVAS Forward registry

Freedom from endoleak



The EVAS Forward registry

Survival



Problems with FEVAR

Limited applicability (high turn-down rate)

Complex intervention¹

High 30 day mortality for zone 6 repairs¹⁻²

Cost

Temporal constraints

No conclusive advantage vs open repair³



¹BSET & Globalstar, *Circulation* 2012

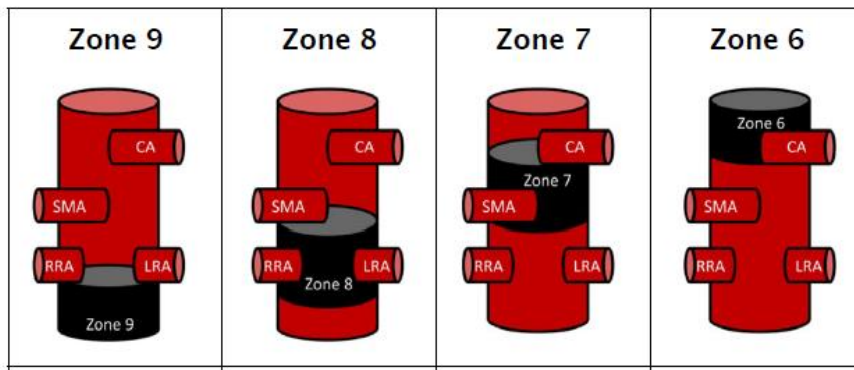
²Patel et al., *JVS* 2015

³Rao et al., *JVS* 2015

FEVAR/BEVAR in Liverpool

Proximal landing zone - last 50 cases

N	FEVAR/BEVAR	Configuration	Zone
11	BEVAR	4B/F	<6
19	FEVAR	3F 1S	6
17	FEVAR	4F	6
1	FEVAR	3F	6
1	FEVAR	2F 1S	6
1	FEVAR	1F1S	6



Configuration of Stent-Graft and Target Vessels¹

Target Vessels	Configuration	n
CA+SMA+ Rt and Lt renals	4F	8
	1S 3F	53
	2S 2F	2
CA+SMA+ renal	1S 2F	1
SMA+Rt and Lt renals	3F	48
	1S 2F	114
	2S 1F	6
Rt and Lt renals	1S 1F	13
	2F	44
	1S	4
One renal	1F	12

¹ S indicates scallop; F, fenestration; CA, celiac artery; SMA, superior mesenteric artery; Rt, right; and Lt, left.

30-d mortality of “zone 6” FEVAR

BSET/Globalstar ¹	9.4%
Patel et al. ²	24%

¹BSET & Globalstar, Circulation 2012

²Patel et al., JVS 2015

chEVAS

154 AAAs in ASCEND registry

30 day all cause mortality

2.8%

30 day mortality for zone 6-7 chEVAS

0%

1y freedom from aneurysm related mortality

94.3%

chEVAS

154 AAAs in ASCEND registry

All Endoleak

	Total	Type Ia	Type Ib	Type II	Type III
Early (154)	1.9% (3)	0.6% (1)	1.3% (2)	0%	0%
Late (136)	2.9% (4)	2.9% (4)	0%	0%	0%

Type 1a Endoleak

	Total	Single	Double	Triple- Quadruple
Early (154)	0.6% (1/154)	0% (0/62)	1.9% (1/54)	0% (0/38)
Late (136)	2.9% (4/136)	5.2% (3/58)	0% (0/51)	2.9% (1/34)

chEVAS

154 AAAs in ASCEND registry

Persistent endoleaks

	Total	Type Ia	Type Ib	Type II	Type III
Early (154)	0%	0%	0%	0%	0%
Late (136)	0%	0%	0%	0%	0%

**EVAS and chEVAS will replace
EVAR and FEVAR**

Place your bets now