surgical interventions, and 47 were managed non-operatively. Patients with FT >2.5 mm had higher rates of aneurysmal growth (2.7 vs 0.3 mm/y; $P = .01$). In addition, patients with FT >2.5 mm had worse survival (median survival, 61 vs 100 months; $P = .03$). However, multivariate analysis showed that only age (hazard ratio, 1.13; 95% confidence interval, 1.06-1.2; $P < .000$) and growth rate >2 mm were independent predictors of survival (hazard ratio, 0.1; 95% confidence interval, 0.02-0.5; $P < .004$; Fig).

Conclusions: Flap thickness in TABD predicts aneurysmal expansion.

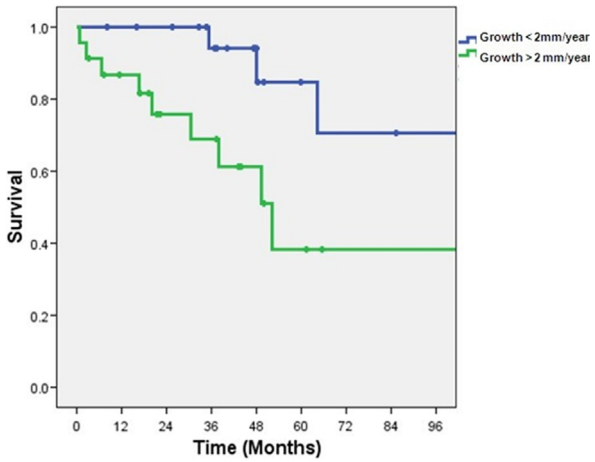

Fig. Comparision of survival.

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PS10

Adherence to EVAR Device Instructions-for-Use (IFU) Guidelines Has No Impact on Long-Term Outcomes

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Objectives: Prior reports have suggested unfavorable outcomes after endovascular aneurysm repair (EVAR) performed outside of the recommended instructions for use (IFU). We report our long-term EVAR experience with regard to IFU in a large multicenter registry.

Methods: Between 2000 and 2010, 1736 patients underwent EVAR, with 92% follow-up. Baseline anatomic measurements obtained from M2S, Inc imaging database were compared with device-specific IFU. Primary outcomes were mortality and aneurysm-related mortality (ARM). Secondary outcomes were endoleak status, adverse events, and reintervention.

Results: During the median follow-up of 2.7 years, 489 patients (28.2%) had preoperative anatomic data available. Overall, 58% had EVAR performed within and 42% outside of IFU guidelines. Of the outside IFU cases, 62.4% had short neck length, 10.2% had greater angulation, 7.3% did not meet neck diameter criteria, and 20% had multiple anatomic issues. There was no difference in any of the primary or secondary outcomes between the two groups (Table). Percentage change in aneurysm sac size over time appeared similar (−12.1% vs −14.1% at 5 years), with no significant difference in sac increase at any time point during follow-up. Cox proportional hazard models showed that IFU nonadherence was not predictive of overall mortality (hazard ratio [HR], 1.06; $P = .80$), ARM (HR, 0.17; $P = .07$), or adverse events (HR, 0.84; $P = .61$).

Conclusions: In our cohort of EVAR patients with detailed preoperative anatomic information and long-term follow-up, overall mortality and ARM are unaffected by IFU adherence, despite a higher proportion of women and larger aneurysms in the nonadherent group. In addition, rates of late endoleak and reintervention are similar, suggesting that operator experience and patient selection influence outcomes despite lack of IFU-based anatomic suitability.

Table. Outcomes between the two groups

	IFU		
	Adherent (n = 284)	*Nonadherent (n = 205)*	P
Female, %	6.7	14.6	<.01
Baseline AAA size, mm	56.6	59.7	<.01
Overall mortality, %	21.1	21.5	.93
ARM, %	2.8	1.0	.20
Type I/III leak, %	3.5	4.4	.62
Adverse events, %	8.8	11.2	.38
Reintervention, %	13.4	17.6	.20

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PS12

Influence of Gender on Abdominal Aortic Aneurysm Repair in the Community

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Objectives: Although much of the management of abdominal aortic aneurysms (AAAs) has been based on outcomes in men, there may be important gender differences in outcomes. The goal of this study was to evaluate

the management and outcomes after AAA repair in women.

Methods: We used the Washington Surgical Care and Outcomes Assessment Program (VI-SCOAP) data that includes details and outcomes of vascular procedures as a part of a statewide quality improvement initiative. We compared demographics, presentation, procedural data, and outcomes between men and women undergoing AAA repair at 19 VI-SCOAP hospitals from July 2010 to September 2013.

Results: We identified 1233 patients (19.5% women) who underwent repair of an intact (n = 1065 [86.5%]) or ruptured AAA (n = 142 [13.5%]). Endovascular repair was performed in 969 (78.6%) of these patients. Men and women were of equivalent age (73.1 vs 73.4 years; $P < .001$), although women had smaller aneurysm diameters (6.4 ± 4.2 vs 5.8 ± 1.1 cm; $P = .03$) at the time of presentation. Men were more likely to present with leak or rupture (14.3% vs 10.4%; $P < .001$) and more likely to have EVAR (80.0% vs 73.0%; $P < .001$). Overall, women had higher hospital mortality (6.2% vs 3.2%; $P < .001$) and were less likely to be discharged to home after longer hospital stays (6.0 ± 9.1 days vs 4.6 ± 6.5 days; $P = .029$). Mortality was significantly higher in women having elective repair (4.2% vs 0.8%; $P = .01$), but not undergoing ruptured repair (24.0% vs 18.0%; $P = .4$).

Conclusions: Despite presentation at a similar age, with a smaller aneurysm diameter, and lower incidence of rupture, hospital outcomes in women are substantially worse than in men. Although use of endovascular techniques in women was high, it remained significantly lower than in men. Improved outcomes likely depend not only on technical improvements in repair techniques but also on patient stratification and management strategies that may differ in men and women.

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PS14

Does CTA Surveillance after EVAR Accelerate Age-Related Decline in Renal Function?

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Objectives: Intravenous contrast used for computed tomography angiography (CTA) can adversely affect renal function in certain clinical contexts, and this is often cited as a reason for modification of standard surveillance imaging after endovascular repair of abdominal aortic aneurysms (EVAR). We examined renal function after EVAR and compared this to the expected age-related renal function decline from historic controls.

Methods: Of 140 consecutive male patients who underwent EVAR, 27 were excluded from analysis due to follow-up of <1 year. Using serum creatinine values, we calculated the change in estimated glomerular filtration rate (GFR) over the postoperative period.

Results: The 113 patients examined had an average of 4.1 CTAs (range, 1-12 CTAs) over a mean follow up of 3.8 years (range, 1-12 years). Mean yearly decline in GFR after EVAR was 1.20 mL/min/1.73 m^2, compared with the rate from age-matched historical controls of 1.4 mL/min/1.73 m^2. The 29 patients who had baseline chronic kidney disease (CKD), or GFR <60 mL/min/1.73 m^2, had yearly GFR decline comparable to the 84 patients without CKD (1.26 vs 1.19 mL/min/1.73 m^2/y, respectively; $P = .94$). Two patients progressed to dialysis, which was related to remote nephrectomy in one and diabetic nephropathy in another.

Conclusions: Patients receiving on average four CTAs after EVAR exhibited a gradual GFR decline over 4 years of follow-up, which compared closely with the expected age-related decline. Standard post-EVAR CTA surveillance does not accelerate renal function decline to a degree that is detectable by serum creatinine-based calculations of estimated GFR.

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PS16

Ambulatory Endovascular Abdominal Aortic Aneurysm (AAA) Repair in the National Surgical Quality Improvement Project (NSQIP)

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Objectives: Length of stay after abdominal aortic aneurysm repair has decreased with endovascular aneurysm repair (EVAR), although though reports of ambulatory EVAR (aEVAR) are limited. We compared the safety and cost of aEVAR vs inpatient EVAR (iEVAR) using clinical and administrative databases.

Table.

	Overall (N = 16,420)	*aEVAR (n = 53)*	*IEVAR (n = 16,637)*	P *(aEVAR vs iEVAR)*
Post-op length of stay, mean (SD) days	2.5 (3.8)	0	2.5 (3.8)	<.01
Any complication, No. (%)	2262 (13.8)	5 (9.4)	2257 (13.8)	.43
Predischarge	1756 (10.7)	4 (7.5)	1752 (10.7)	.66
Postdischarge	714 (4.3)	2 (3.8)	712 (4.4)	1.00
Mortality, No. (%)	168 (1.0)	0	168 (1.0)	1.00
Predischarge	97 (0.6)	x	97 (0.6)	1.00
Postdischarge	54 (0.3)	0	54 (0.3)	1.00
Readmission	205 (8.3)	0	205 (8.3)	1.00
Return to operating room	612 (3.7)	2 (3.8)	610 (3.7)	1.00