

SUPPLEMENTAL MATERIAL

Table S1. Baseline demographics of men and women with untreated iAAAs 2001-2015.

	All = 19 569	Men = 15 020 (77%)	Women = 4549 (23%)
Age			
Mean age (SD)	73.7 (8.6)	73.0 (8.5)	76.1 (8.5)
<60 (n; %)	746 (3.8)	587 (3.9)	159 (3.5)
60–69 (n; %)	5963 (30.5)	5138 (34.2)	825 (18.1)
70–79 (n; %)	7349 (37.6)	5500 (36.6)	1849 (40.6)
≥80 (n; %)	5511 (28.2)	3795 (25.3)	1716 (37.7)
Comorbidity groups			
None or unknown (n; %)	4974 (25.4)	3921 (26.1)	1053 (23.1)
Cardiovascular/renal (n; %) *	5846 (29.9)	4667 (31.1)	1179 (25.9)
Neurological (n; %) †	1122 (5.7)	873 (5.8)	249 (5.5)
COPD (n; %)	2476 (12.7)	1699 (11.3)	777 (17.1)
Diabetes mellitus (n; %)	2260 (11.5)	1788 (11.9)	472 (10.4)
Malignancy (n; %)	5845 (29.9)	4601 (30.6)	1244 (27.3)
Other (n; %) ‡	9700 (49.6)	7311 (48.7)	2389 (52.5)
Household income			
Low (n; %)	6824 (34.9)	4442 (29.6)	2382 (52.4)
Middle (n; %)	6391 (32.7)	5011 (33.4)	1380 (30.3)
High (n; %)	6354 (32.5)	5567 (37.1)	787 (17.3)
Marital status §			
Married (n; %)	10 703 (54.7)	9246 (61.6)	1457 (32.0)
Unmarried (n; %)	5288 (27.0)	4038 (26.9)	1250 (27.5)
Widowed (n; %)	3573 (18.3)	1731 (11.5)	1842 (40.5)
Year of diagnosis			
2001–2003 (n; %)	2436 (12.4)	1714 (11.4)	722 (15.9)
2004–2006 (n; %)	2621 (13.4)	1848 (12.3)	773 (17.0)
2007–2009 (n; %)	3642 (18.6)	2716 (18.1)	926 (20.4)
2010–2012 (n; %)	5432 (27.8)	4402 (29.3)	1030 (22.6)
2013–2015 (n; %)	5438 (27.8)	4340 (28.9)	1098 (24.1)

* Any of the following: cardiac disease, thoracic aortic aneurysm, aortic dissection, renal failure

† Stroke and/or dementia

‡ Any of the following: arrhythmia, hypertension, hyperlipidaemia, PAD

§ 5 (0.0) men missing.

iAAA = intact abdominal aortic aneurysm, SD = standard deviation, COPD = chronic obstructive pulmonary disease, PAD = peripheral artery disease

Table S2. Unadjusted and adjusted associations between baseline demographics and the risk of rupture (1016 events) within 5 years among untreated patients with iAAAs. Significant adjusted risks are highlighted. *

	Unadjusted			Adjusted		
	HR	95% CI	P	HR	95% CI	P
Sex						
Men	Ref	Ref	Ref	Ref	Ref	Ref
Women	1.81	1.59-2.06	<0.001	1.23	1.07-1.42	0.004
Age groups						
<60	Ref	Ref	Ref	Ref	Ref	Ref
60–69	1.69	0.82-3.48	0.152	2.02	0.98-4.15	0.057
70–79	4.96	2.46-10.00	<0.001	4.41	2.18-8.92	<0.001
≥80	14.16	7.05-28.46	<0.001	11.49	5.68-23.25	<0.001
Comorbidity groups						
Cardiovascular/renal	0.96	0.84-1.10	0.586	1.01	0.88-1.16	0.876
Neurological	0.85	0.63-1.15	0.295	0.85	0.62-1.15	0.293
COPD	1.43	1.20-1.70	<0.001	1.36	1.15-1.62	<0.001
Diabetes mellitus	0.72	0.58-0.91	0.005	0.86	0.68-1.08	0.191
Malignancy	1.06	0.93-1.21	0.393	0.99	0.87-1.14	0.919
Household income						
Low	Ref	Ref	Ref	Ref	Ref	Ref
Middle	0.66	0.58-0.76	<0.001	0.81	0.70-0.93	0.004
High	0.35	0.30-0.41	<0.001	0.63	0.53-0.75	<0.001
Marital status						
Married	Ref	Ref	Ref	Ref	Ref	Ref
Unmarried	0.82	0.69-0.96	0.016	0.93	0.78-1.10	0.383
Widowed	1.94	1.68-2.24	<0.001	0.96	0.82-1.13	0.656
Period						
2001–2003	Ref	Ref	Ref	Ref	Ref	Ref
2004–2006	0.82	0.68-0.98	0.027	0.81	0.67-0.97	0.020
2007–2009	0.62	0.52-0.74	<0.001	0.65	0.54-0.77	<0.001
2010–2012	0.31	0.26-0.38	<0.001	0.41	0.34-0.49	<0.001
2013–2015	0.28	0.22-0.35	<0.001	0.36	0.28-0.46	<0.001

* Five observations excluded due to missing marital status.

Table S3. Unadjusted and adjusted associations between baseline demographics and the risk of death (7231 events) within 5 years among untreated patients with iAAAs. Significant adjusted risks are highlighted. *

	Unadjusted			Adjusted		
	HR	95% CI	P	HR	95% CI	P
Sex						
Men	Ref	Ref	Ref	Ref	Ref	Ref
Women	1.36	1.29-1.43	<0.001	0.95	0.89-1.00	0.054
Age groups						
<60	Ref	Ref	Ref	Ref	Ref	Ref
60–69	1.28	1.05-1.58	0.017	1.48	1.20-1.81	<0.001
70–79	3.32	2.73-4.05	<0.001	3.04	2.49-3.72	<0.001
≥80	7.16	5.88-8.72	<0.001	6.26	5.12-7.65	<0.001
Comorbidity groups						
Cardiovascular/renal	1.33	1.27-1.40	<0.001	1.32	1.26-1.39	<0.001
Neurological	1.83	1.69-1.99	<0.001	1.75	1.61-1.90	<0.001
COPD	1.85	1.74-0.96	<0.001	1.62	1.52-1.72	<0.001
Diabetes mellitus	1.08	0.95-1.21	0.235	1.13	1.01-1.27	0.041
Malignancy	1.40	1.33-1.47	<0.001	1.28	1.22-1.35	<0.001
Household income						
Low	Ref	Ref	Ref	Ref	Ref	Ref
Middle	0.75	0.72-0.80	<0.001	0.88	0.84-0.93	<0.001
High	0.44	0.41-0.46	<0.001	0.72	0.68-0.77	<0.001
Marital status						
Married	Ref	Ref	Ref	Ref	Ref	Ref
Unmarried	1.05	0.99-1.11	0.085	1.19	1.12-1.26	<0.001
Widowed	1.98	1.87-2.09	<0.001	1.25	1.18-1.33	<0.001
Period						
2001–2003	Ref	Ref	Ref	Ref	Ref	Ref
2004–2006	0.91	0.85-0.98	0.015	0.86	0.80-0.93	<0.001
2007–2009	0.68	0.64-0.73	<0.001	0.66	0.61-0.71	<0.001
2010–2012	0.47	0.44-0.50	<0.001	0.54	0.50-0.58	<0.001
2013–2015	0.44	0.40-0.48	<0.001	0.50	0.45-0.54	<0.001

* Five observations excluded due to missing marital status.

Table S4. Demographics and AAA diameters in 120 women and 120 men under surveillance at outpatient vascular clinic.

	Total = 240	Men = 120	Women = 120	p
Median age	78 (45)	76 (42)	79 (43)	<0.05
Smoking				
Ever	189 (81.5)	95 (81.2)	94 (81.7)	0.91
Never	43 (18.5)	22 (18.8)	21 (18.3)	0.87
Comorbidities				
Hypertension	186 (77.5)	95 (79.2)	91 (75.8)	0.64
Diabetes mellitus	59 (24.6)	34 (28.3)	25 (20.8)	0.23
Cardiac disease	90 (37.7)	48 (40.3)	42 (35.0)	0.43
Stroke/TIA	34 (14.2)	21 (17.5)	13 (10.8)	0.20
COPD	60 (25.0)	26 (21.7)	34 (28.3)	0.30
Medical treatment				
Antiplatelet agents	170 (70.8)	88 (73.3)	82 (68.3)	0.48
Statins	142 (59.2)	78 (65.0)	64 (53.3)	0.08
Body size & Aortic morphology				
Weight (kg)	75 (85)	85 (65)	65.5 (75)	<0.05
Height (m)	1.72 (0.58)	1.78 (0.37)	1.64 (0.34)	<0.05
Aortic diameter (mm)	42 (37)	43 (37)	41.5 (30)	0.21
BMI (kg/m ²)	26 (25)	27 (20)	24 (25)	<0.05
BSA (m ²)	1.9 (3.7)	2.0 (3.3)	1.7 (3.7)	<0.05
ASI (cm/m ²)	2.2 (3.7)	2.1 (3.7)	2.4 (3.5)	<0.05

Variables summarized by medians with interquartile range or percentages for categorical variables.

AAA = abdominal aortic aneurysm, BMI = body mass index, BSA = body surface area, ASI = aortic size index, GFR = glomerular filtration rate (ml/min), TIA = transient ischemic attack, COPD = chronic obstructive pulmonary disease.

Figure S1. Time to death for untreated men and women with iAAAs presented in the four age groups of A) <60 years B) 60-69 years C) 70-79 years D) ≥80 years.

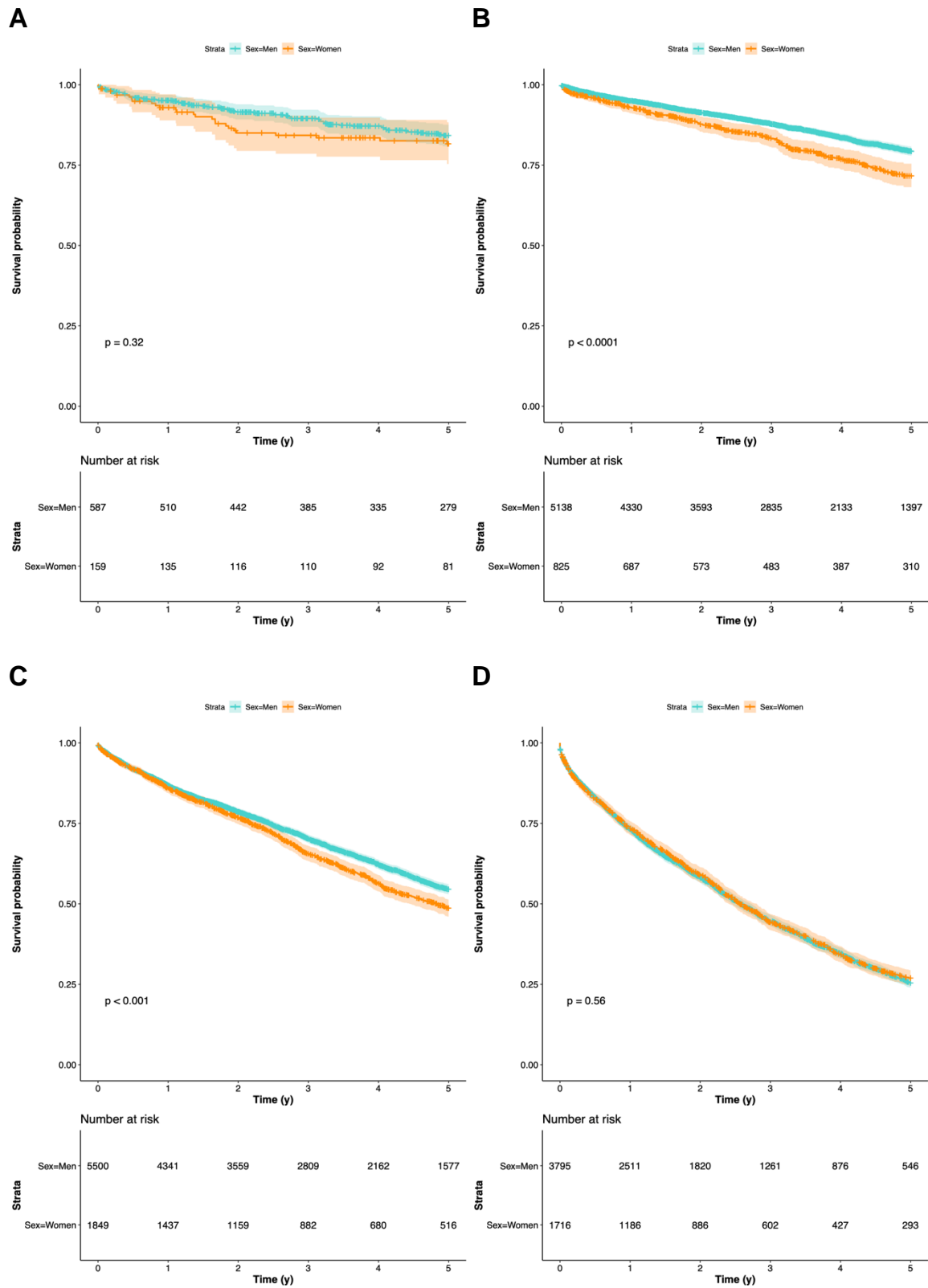


Figure S2. Age distributions of untreated men and women with rupture within 5 years after diagnosis. *

* All patients with rupture within 5 years included regardless of year of diagnosis.

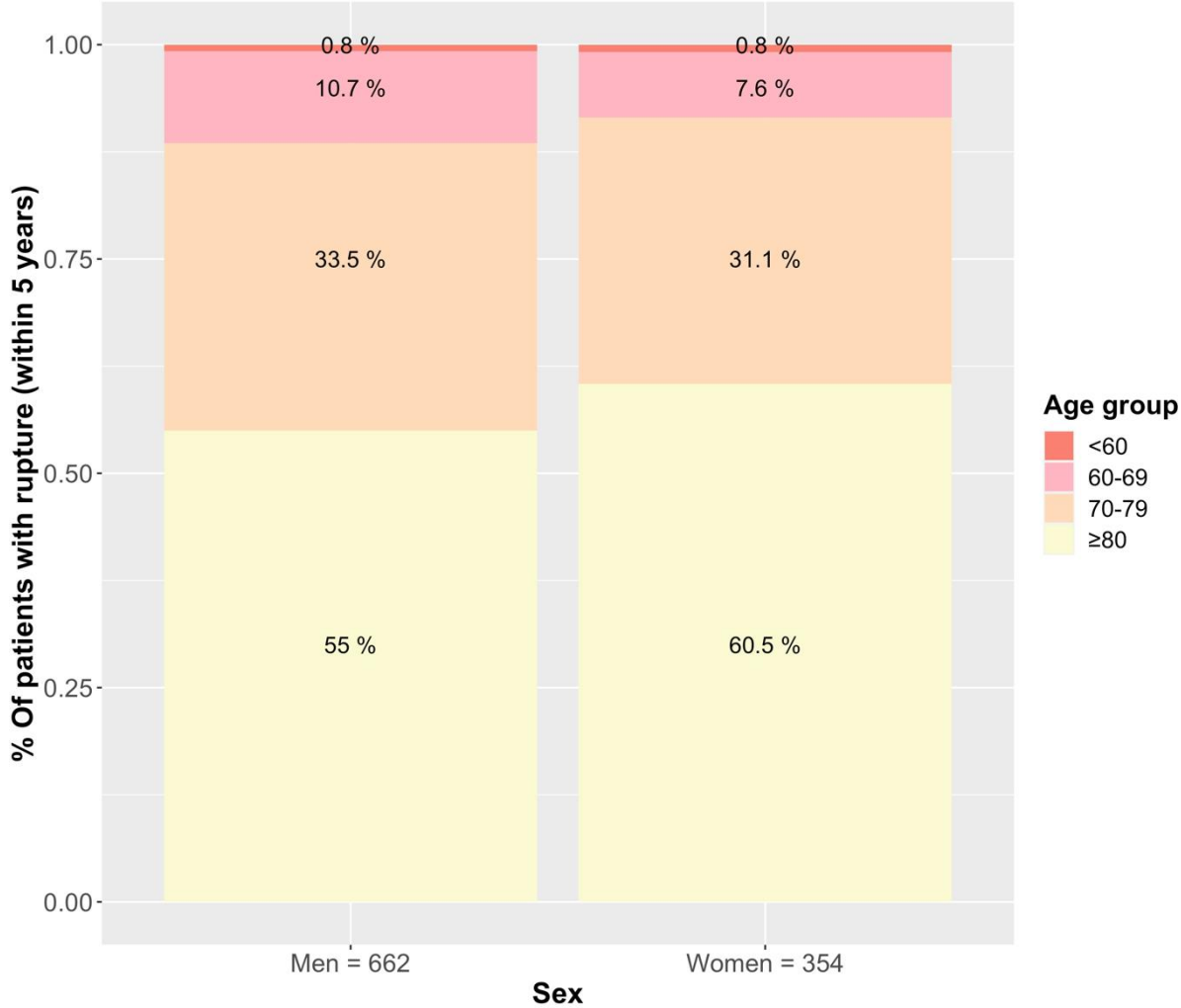
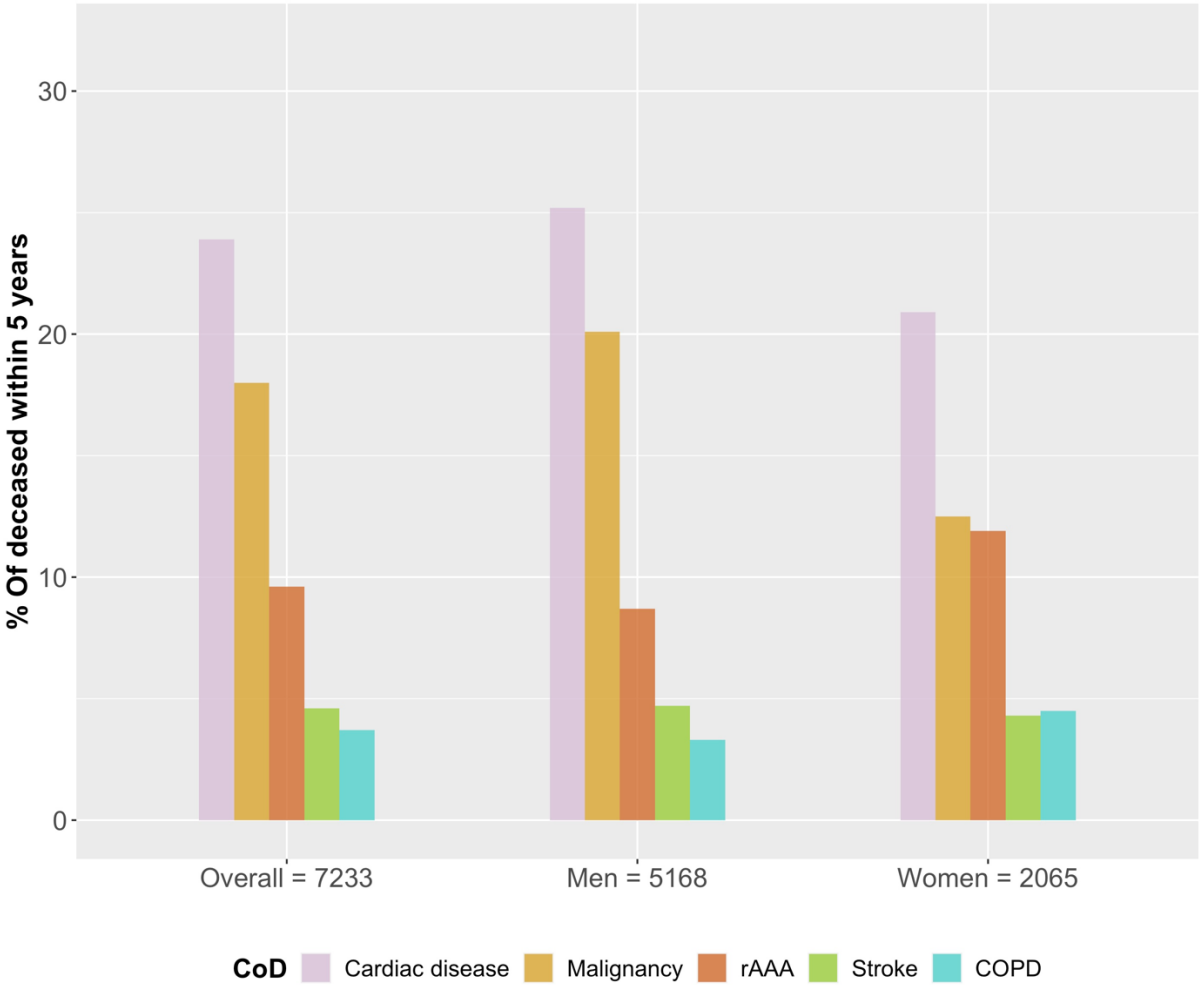


Figure S3. Top 5 causes of death among untreated men and women deceased within 5 years of iAAA diagnosis.



ICD codes for CoDs in untreated cohort Cardiac disease = I20-I25X, I42-I43, I50, I11.0, I13.0 Malignancy = CX rAAA = I71.3 Stroke = I61X, I63-I64X, I69X COPD = J44X

CoD = cause of death, COPD = chronic obstructive pulmonary disease, rAAA = ruptured abdominal aortic aneurysm, ICD = International Classification of Diseases