

Supplemental material

Supplemental table 1. Baseline characteristics according to gender

Factor	Female	Male	p-value
N	760	780	
Age (years), mean (SD)	83 (7)	81 (7)	<0.001
Baseline creatinine (mmol/L), mean (SD)	91 (29)	111 (39)	<0.001
eGFR at baseline (ml/min/1.73m ²), mean (SD)	57 (20)	61 (22)	0.001
AKI according to VARC-2-criteria	27 (3.6%)	67 (8.6%)	<0.001
VARC-2-criteria			
1.5-1.99x increase or 26 mmol/L in creatinine	23 (85%)	55 (82%)	0.94
2-2.9x increase in creatinine	1 (4%)	3 (4%)	
>=3x increase in creatinine/renal replacement therapy	3 (11%)	9 (13%)	
Percentage change in creatinine from baseline to discharge, mean (SD)	-5.3 (22)	-1.4 (25)	0.001
Change in creatinine from baseline to discharge			
≥25% in creatinine	47 (6.2%)	62 (7.9%)	0.18
≥ 50% increase in creatinine	2 (0.3%)	3 (0.4%)	0.68
≥26 mmol/L increase in creatinine	25 (3.3%)	63 (8.1%)	<0.001
Received dialysis	2 (0.3%)	8 (1.0%)	0.063
4 CKD grupper vid baselin (excluding eGFR <15)			
≥60	314 (41.3%)	375 (48.1%)	0.015
45-59	217 (28.6%)	219 (28.1%)	
30-44	182 (23.9%)	141 (18.1%)	
15-29	47 (6.2%)	45 (5.8%)	
Weight (kg), mean (SD)	68 (15)	80 (15)	<0.001
Height (cm), mean (SD)	161 (6)	17 (7)	<0.001
Body surface area, mean (SD)	1.7 (0.2)	1.9 (0.2)	<0.001
Diabetes mellitus	147 (19.3%)	193 (24.7%)	0.011

Known hypertension	548 (72.1%)	564 (72.3%)	0.93
COPD	144 (18.9%)	167 (21.4%)	0.23
Prior cardiac surgery	126 (16.6%)	327 (41.9%)	<0.001
Prior PCI	178 (23.4%)	268 (34.4%)	<0.001
Prior stroke	95 (12.5%)	127 (16.3%)	0.035
Known peripheral arterial disease	147 (19.3%)	167 (21.4%)	0.31
Atrial fibrillation	265 (34.9%)	281 (36.0%)	0.64
NYHA class			
NYHA 1	2 (0.3%)	4 (0.5%)	0.019
NYHA 2	38 (5.0%)	68 (8.7%)	
NYHA 3	593 (78.2%)	570 (73.1%)	
NYHA 4	125 (16.5%)	138 (17.7%)	
Logistic Euroscore, mean (SD)	22% (13)	22 (15)	0.47
Urgent TAVI	5 (0.7%)	12 (1.5%)	0.098
Make of prosthesis			
Core-Valve	385 (50.7%)	439 (56.3%)	<0.001
Edwards	324 (42.7%)	320 (41.0%)	
Other	50 (6.6%)	21 (2.7%)	
Aortic valve area (cm ²), mean (SD)	0.6 (0.2)	0.7 (0.2)	<0.001
Max aortic valve gradient (mmHg), mean (SD)	83 (25)	75 (21)	<0.001
Mean aortic valve gradient (mmHg), mean (SD)	51 (17)	46 (14)	<0.001
Annulus diameter (mm), mean (SD)	22 (2.2)	24.7 (2.6)	<0.001
LVEF %			
LVEF ≥50%	517 (68.2%)	407 (52.2%)	<0.001
LVEF 40-40%	121 (16.0%)	148 (19.0%)	
LVEF 30-39%	83 (10.9%)	133 (17.1%)	
LVEF ≤30	37 (4.9%)	91 (11.7%)	
Systolic pulmonary artery pressure (mmHg), mean (SD)	45 (15)	44 (15)	0.41
Aortic regurgitation (0-3)			
0	270 (36.0%)	273 (35.3%)	0.072

	1	386 (51.4%)	423 (54.7%)	
	2	83 (11.1%)	59 (7.6%)	
	3	12 (1.6%)	19 (2.5%)	
Mitral regurgitation (0-3)				
	0	168 (22.5%)	212 (27.6%)	0.012
	1	430 (57.6%)	443 (57.6%)	
	2	129 (17.3%)	104 (13.5%)	
	3	20 (2.7%)	10 (1.3%)	
Contrast volume (ml), mean (SD)				
		105 (739)	118 (84)	0.001
Contrast volume/Creatinine clearance-ratio, mean (SD)				
		2.5 (2.1)	2.3 (1.9)	0.039
<3 ml/CrCl				
		554 (73.0%)	583 (75.0%)	0.63
3-3.9 ml/CrCl				
		90 (11.9%)	88 (11.3%)	
≥4 ml/CrCl				
		115 (15.2%)	106 (13.6%)	
Fluoroscopy time (min), mean (SD)				
		1407 (1024)	1445 (1134)	0.49
Peri/Post-procedural bleeding				
		72 (%)	51 (%)	0.034
Length of in-hospital stay (days), mean (SD)				
		7.4 (12)	6.8 (11)	0.28

Supplemental table 2. Gender distribution according to different definitions of persistent acute kidney injury.

Factor	Female	Male	Total	p-value (Chi2)
N	767	794		
AKI according to VARC2-criteria	27 (3.6%)	67 (8.6%)	94	<0.001
≥25% increase in creatinine or initiation of dialysis	49 (6.4%)	68 (8.6%)	117	0.093
RIFLE-criteria: ≥R ≥25% absolute increase in eGFR (CKDEPI), or ≥150% increase in creatinine or initiation of dialysis	38 (5.0%)	65 (8.3%)	103	0.009

Supplemental table 3. Predictors of persistent AKI according to different definitions of AKI

	VARC-2		≥25% absolute increase in creatinine or dialysis		≥R in RIFLE-criteria: ≥25% decrease in eGFR (CKDEPI) or ≥150% increase in creatinine or dialysis	
	Multivariable OR* (95%CI)	p-value	Multivariable OR* (95%CI)	p-value	Multivariable OR* (95%CI)	p-value
Age/10 year increase	0.85 (0.63-1.16)	0.312	1.01 (0.76-1.34)	0.951	0.96 (0.72-1.30)	0.802
eGFR/10 ml/min/1.73m ² increase	0.88 (0.79-0.98)	0.019	1.09 (0.99-1.19)	0.075	1.07 (0.98-1.18)	0.150
Contrast volume per 10 ml increase	1.02 (1.00-1.05)	0.052	1.02 (0.99-1.04)	0.178	1.02 (0.99-1.04)	0.118
Male	2.68 (1.63-4.38)	<0.001	1.32 (0.88-2.00)	0.184	1.71 (1.09-2.68)	0.019
Known diabetes	1.09 (0.66-1.80)	0.735	1.22 (0.78-1.92)	0.388	1.22 (0.75-1.96)	0.425
LVEF >50%	1.0 (ref)		1.0 (ref)		1.0 (ref)	
LVEF 40-49%	1.02 (0.57-1.81)	0.955	0.79 (0.45-1.37)	0.396	0.90 (0.51-1.60)	0.716
LVEF 30-39%	1.18 (0.66-2.12)	0.580	1.18 (0.69-2.04)	0.539	1.26 (0.71-2.23)	0.437
LVEF <30%	0.74 (0.32-1.72)	0.489	0.94 (0.45-1.98)	0.879	1.08 (0.51-2.30)	0.838
COPD	1.59 (0.99-2.59)	0.057	1.59 (1.03-2.46)	0.038	1.45 (0.91-2.32)	0.118
Bleeding complication	1.64 (0.81-3.33)	0.169	1.58 (0.85-2.95)	0.150	1.93 (1.03-3.62)	0.042
Access site	1.0 (Ref transfemoral)		1.0 (Ref transfemoral)		1.0 (Ref transfemoral)	
Apical	2.23 (1.35-3.69)	0.002	1.83 (1.14-2.93)	0.012	1.89 (1.15-3.11)	0.012
Subclavia	1.34 (0.30-5.94)	0.697	1.37 (0.40-4.72)	0.615	1.67 (0.48-5.82)	0.412
Direct aortic	3.54 (0.95-13.3)	0.060	2.28 (0.63-8.16)	0.207	2.84 (0.78-10.2)	0.112
Prior CABG/PCI	0.90 (0.57-1.42)	0.658	0.96 (0.64-1.44)	0.834	0.85 (0.55-1.30)	0.453

Supplemental table 4. Multivariate adjusted 1-year mortality according to the 3 different AKI definitions and for male gender.

	Multivariable adjusted HR 95% CI	p-value
Model 1*		
VARC-2	2.68 (1.76-4.09)	<0.001
Male gender	1.56 (1.10-2.21)	0.012
Model 2*		
≥25% increase in creatinine or dialysis	2.14 (1.38-3.29)	0.001
Male gender	1.66 (1.18-2.34)	0.004
Model 3*		
≥25% decrease in eGFR (CKDEPI) or ≥150% increase in creatinine or dialysis	2.02 (1.28-3.20)	0.003
Male gender	1.65 (1.17-2.32)	0.004

* Adjusted for the same variables as in the main analysis (see table 3).