

SUPPLEMENTAL APPENDIX

Sites included in the SwissTAVI registry:

Department of Cardiology and Cardiovascular Surgery, Inselspital, Bern University Hospital, Bern

Department of Cardiology and Cardiac surgery, University Heart Center, Zurich

Department of Cardiology, Heart Clinic Hirslanden, Zurich

Department of Cardiology, Basel University Hospital, University of Basel, Basel

Department of Cardiology, Lausanne University Hospital, Lausanne

Department of Cardiology, Triemli Hospital Zurich, Zurich

Department of Cardiology and Cardiovascular Surgery, Geneva University Hospital, Geneva

Department of Cardiology, Cantonal Hospital, Luzern

Department of Cardiac Surgery, Cardiocentro Ticino, Lugano

Heart Center Aargau, Aarau

Department of Cardiology, Hirslanden Clinique Cecil, Lausanne

Cardiovascular Center Zurich, Hirslanden Klinik Im Park, Zurich

Departement of Cardiology, Hirslanden BeauSite, Bern

Department of Cardiology, Hôpital de La Tour, Geneva

Department of Cardiology, Heart Center Kreuzlingen, Kreuzlingen

SUPPLEMENTAL TABLE 1. IN-HOSPITAL OUTCOMES

	AGE GROUPS (YEARS)					LINEAR TREND RATE RATIOS [95% CI]			
	ALL PATIENTS	<70	70-79	80-89	90-100	RR [95% CI]	P-VALUE	ADJ.RR [95% CI]	ADJ.P-VALUE
	N = 7097	N = 324	N = 1913	N = 4353	N = 507				
Mortality	191 (2.7)	7 (2.2)	31 (1.6)	125 (2.9)	28 (5.5)	1.64 (1.28-2.10)	<0.001	1.50 (1.18-1.89)	0.001
Cardiovascular Mortality	173 (2.4)	5 (1.5)	29 (1.5)	113 (2.6)	26 (5.1)	1.70 (1.31-2.20)	<0.001	1.58 (1.22-2.04)	0.001
<i>Cerebrovascular Accident</i>									
Disabling Stroke	121 (1.7)	1 (0.3)	23 (1.2)	84 (1.9)	13 (2.6)	1.60 (1.22-2.08)	0.001	1.53 (1.16-2.00)	0.002
Myocardial Infarction	37 (0.5)	1 (0.3)	11 (0.6)	24 (0.6)	1 (0.2)	0.92 (0.62-1.39)	0.71	0.94 (0.62-1.42)	0.76
Acute Kidney Injury - Stage 3	97 (1.4)	11 (3.4)	31 (1.6)	50 (1.1)	5 (1.0)	0.65 (0.48-0.87)	0.004	0.59 (0.44-0.78)	<0.001
Bleeding									
Life Threatening Bleeding	350 (4.9)	21 (6.5)	72 (3.8)	231 (5.3)	26 (5.1)	1.09 (0.93-1.28)	0.29	1.05 (0.89-1.24)	0.56
Major Bleeding	518 (7.3)	17 (5.2)	132 (6.9)	335 (7.7)	34 (6.7)	1.08 (0.96-1.22)	0.20	1.03 (0.91-1.17)	0.60
Access Related Complications									
Major Vascular Complications	687 (9.7)	24 (7.4)	171 (8.9)	444 (10.2)	48 (9.5)	1.10 (0.99-1.22)	0.083	1.06 (0.95-1.18)	0.28
Pacemaker implantation	1134 (16.0)	33 (10.2)	262 (13.7)	744 (17.1)	95 (18.7)	1.22 (1.12-1.32)	<0.001	1.21 (1.11-1.32)	<0.001

Depicted are nr of event (%), only first event of each type counted per patient. Rate ratio (95% CI) from Poisson regression with robustified standard errors; adjusted rate ratio after correcting for STS PROM score, femoral access vs other access and year of procedure (in case of less than ten events no adjusted analysis conducted).

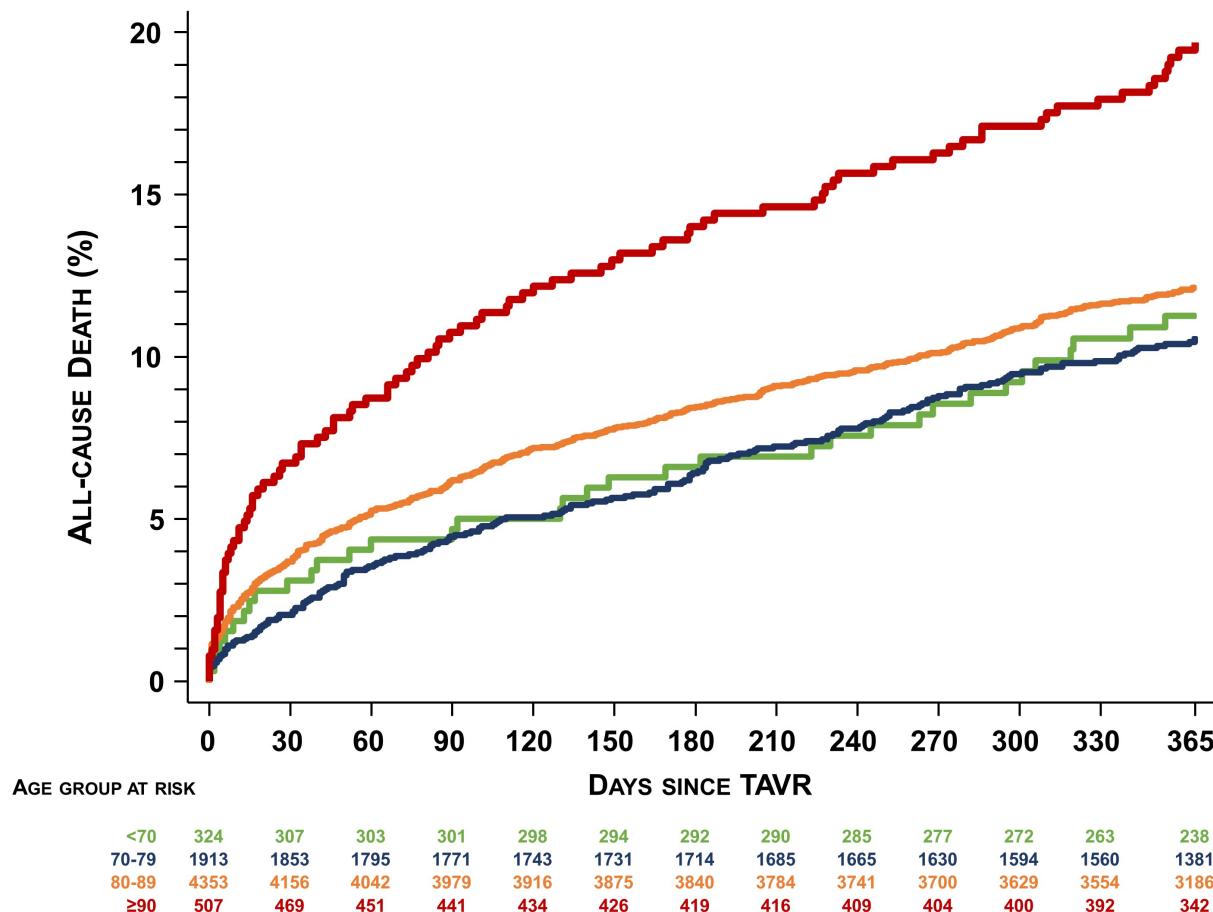
SUPPLEMENTAL TABLE 2. PREDICTORS OF ONE-YEAR MORTALITY IN NONAGENARIANS DISCHARGED ALIVE (N=479)

	UNIVARIABLE		MULTIVARIABLE	
	HR (95% CI)	p-value	Adj.HR (95% CI)	Adj. p-value
Age (years)	1.01 (0.88-1.15)	0.91	0.96 (0.82-1.12)	0.59
Females	0.89 (0.55-1.43)	0.63	0.98 (0.55-1.76)	0.96
Body mass index (kg/cm ²)	0.99 (0.93-1.05)	0.68	0.98 (0.91-1.06)	0.62
Diabetes mellitus	1.22 (0.60-2.45)	0.58	1.37 (0.61-3.07)	0.44
Dyslipidemia	1.07 (0.66-1.73)	0.78	0.83 (0.47-1.47)	0.53
Art. hypertension	0.59 (0.36-0.97)	0.037	0.62 (0.35-1.09)	0.096
Previous pacemaker implantation	1.38 (0.75-2.52)	0.30	1.23 (0.61-2.46)	0.57
History of myocardial infarction	0.97 (0.44-2.12)	0.94	0.92 (0.39-2.17)	0.85
History of cardiac surgery	1.08 (0.52-2.25)	0.84	1.03 (0.44-2.42)	0.94
History of cerebrovascular accident	0.75 (0.36-1.57)	0.44	0.83 (0.38-1.81)	0.64
Peripheral artery disease	2.49 (1.47-4.23)	0.001	2.32 (1.22-4.42)	0.010
COPD	1.24 (0.50-3.07)	0.65	1.25 (0.48-3.26)	0.66
Coronary artery disease	1.23 (0.76-1.99)	0.41	1.14 (0.66-1.97)	0.64
LVEF (%)	0.98 (0.97-1.00)	0.059	0.99 (0.97-1.01)	0.22
Aortic valve area (cm ²)	1.53 (0.52-4.51)	0.44	3.48 (0.86-14.08)	0.080
Mean gradient (mmHg)	0.99 (0.98-1.00)	0.12	1.00 (0.99-1.02)	0.81
NYHA (III or IV)	1.22 (0.72-2.05)	0.46	1.11 (0.63-1.95)	0.72
CCS angina	0.84 (0.51-1.38)	0.49	0.88 (0.52-1.48)	0.63
STS Predicted Risk of Mortality (PROM), %	1.03 (0.99-1.07)	0.12	1.04 (0.98-1.11)	0.19
Surgical access	1.39 (0.75-2.60)	0.30	1.03 (0.51-2.06)	0.94
IN-HOSPITAL OUTCOMES / COMPLICATIONS				
Aortic regurgitation moderate or severe (at discharge)	1.45 (0.63-3.35)	0.38	1.55 (0.64-3.78)	0.33
Life-threatening or major bleeding (in-hospital)	1.06 (0.51-2.22)	0.88	1.82 (0.56-5.93)	0.32
Major Vascular Complication (in-hospital)	0.85 (0.34-2.11)	0.73	0.43 (0.10-1.86)	0.26
Disabling Stroke (in-hospital)	5.22 (2.26-12.06)	<0.001	5.50 (2.15-14.02)	<0.001

Hazard ratios (95% CI) from Cox's regressions

SUPPLEMENTAL FIGURE 1

Rates of all-cause mortality across age groups including land-mark analysis after the peri-procedural period



SUPPLEMENTAL FIGURE 2

standardized mortality ratios (SMRs) to compare trends in mortality of TAVR patients with an age- and sex-matched Swiss general population during the respective year of treatment (downloaded from the Swiss Federal Office for Statistics - Bundesamt für Statistik, Switzerland)

