

Supplementary appendix D. Prognosis of frail TAVI recipients

Study	Procedural/in-hospital	30 days	6 months	8 months	1 year	2 year
Primary outcomes						
Death						
Alfredsson, 2016	300/6100 (4.9%)	405/6100 (6.6%)				
Bureau, 2017		7/71 (9.9%)	13/71 (18.3%)		18/69 (26.1%)	
Bogdan, 2016		4/79 (5.1%)				35.4% (2.1 years)
Capodanno, 2014		30/306 (9.8%)				
Chauhan, 2016		18/233 (7.7%)			48/177 (27.1%)	
Eichler, 2017					30/152 (19.7%)	
Green, 2015		11/110 (10%)			32.7%	
Huded, 2016		2/64 (3.13%)				
Kleczyński, 2017					17/53 (32.1%)	
Martin, 2018		51/1581(3.23%)				
Maniar, 2016		12.3%			36.5%	
Okoh, 2017						30%
Puls, 2014	33/144 (23%)	25/144 (17%)				
Rabinovitz, 2016					12/46 (26.1%)	
Rodriguez-Pascual, 2016						39.7%*(98weeks)
Rodes-Cabau, 2010	2/85 (2.4%)	7/85 (8.2%)		19/85 (22.4%)		
Schoenenberger, 2018					37/169(21.9%)	
Shimura, 2017	15/353 (4.25%)	10/353 (2.83%)				
Steinvil, 2018		14/232 (6.03%)			46/232 (19.8%)	
Shi, 2018			17/116 (15%)			
Skaar, 2018						9/34 (26.47%)
Stortecky, 2012		6/24 (25%)			9/24 (37.5%)	
Traynor, 2017	2/60 (3.3%)				14.8%	
Zajarias, 2016		17/265 (6.4%)			88/265 (33.2%)	
Patel, 2020		5/67 (6.7%)				
Mach, 2020	3/39 (7.69%)					
Drudi, 2020		26/269 (9.67%)				
Kiani, 2020		4.55%			18.07%	
Sami, 2020	301/2865 (10.5%)					
Gharibeh, 2020						25.3%
Voigtlander, 2020		73/956 (7.64%)			255/956 (26.67%)	
Kundi, 2020		587/13593 (4.32%)			2679/13593 (19.71%)	
Death (cardiovascular cause)						
Alfredsson, 2016		251/6100 (4.1%)				
Green, 2015		8/110 (7%)				
Shimura, 2017	4/353(1.13%)	8/353 (2.27%)				
Secondary outcomes						
Acute kidney injury						
Alfredsson, 2016	397/6100 (6.5%)					
Bogdan, 2016		25/79 (31.6%)				
Green, 2012	3/76 (3.95%)					
Okoh, 2017	2/30 (6.67%)					
Shimura, 2017	47/353 (13.31%)					
Yamamoto, 2015	6/56 (10.7%)					
Mach, 2020	8/39 (20.51%)					
Shimura, 2020	43/288 (14.93%)					
Arrhythmia						
Rodes-Cabau, 2010	9/85 (10.6%)					
Annulus rupture						
Yamamoto, 2015	1/56 (1.8%)					
Bleeding						
Zajarias, 2016	15/265 (43.4%)					
Kiani, 2020		11.80%			22.20%	
Shimura, 2020	71/288 (24.65%)					
Cardiac tamponade						
Puls, 2014	3/144 (2%)					
Shimura, 2017	11/353 (3.11%)					
Yamamoto, 2015	3/56 (5.4%)					
Shimura, 2020	6/288 (2.08%)					
Conversion to open surgery						
Rodes-Cabau, 2010	1/85 (1.2%)					
Shimura, 2017	8/353 (2.27%)					
Sami, 2020	284/2865 (9.9%)					
Voigtlander, 2020	7/956 (0.9%)					
Shimura, 2020	0/288 (0%)					
Coronary obstruction						
Shimura, 2017	3/353 (0.85%)					
Delirium						
Bagienski, 2017	105/127 (82.68%)					
Goudzwaard, 2020	24/97 (24.7%)					
Life-threatening bleeding						

Alfredsson, 2016		391/6100 (6.4%)				
Green, 2012	7/76 (9.21%)					
Puls, 2014	15/144 (10%)					
Stortecky, 2012	4/24 (16.7%)					
Shimura, 2017	33/353 (9.35%)					
Yamamoto, 2015	4/56 (7.1%)					
Shimura, 2020	14/288 (4.86%)					
Major bleeding						
Green, 2015		10/110 (9%)				
Koifman, 2015	6/238 (3%)					
Puls, 2014	12/144 (8%)					
Shimura, 2017	77/353 (21.81%)					
Yamamoto, 2015	9/56 (16.1%)					
Mach, 2020	1/39 (2.56%)					
Shimura, 2020	33/288 (11.46%)					
Minor bleeding						
Koifman, 2015	31/238 (13%)					
Puls, 2014	50/144 (35%)					
Shimura, 2017	62/353 (17.56%)					
Mach, 2020	4/39 (10.26%)					
Major vascular complications						
Bogdan, 2016		0/79 (0%)				
Green, 2015		7/110 (6%)				
Koifman, 2015	37/238 (16%)					
Shimura, 2017	18/353 (5.1%)					
Yamamoto, 2015	8/56 (14.3%)					
Shimura, 2020	9/288 (3.13%)					
Minor vascular complications						
Bogdan, 2016		2/79 (2.5%)				
Koifman, 2015	26/238 (11%)					
Shimura, 2017	17/353 (4.82%)					
Major access site complications						
Rodes-Cabau, 2010	12/85 (14.1%)					
Stortecky, 2012	2/24 (8.3%)					
Mach, 2020	1/39 (2.56%)					
Major vascular injury						
Huded, 2016		4/64 (6%)				
Myocardial infarction						
Rodes-Cabau, 2010		2/85 (2.4%)				
Yamamoto, 2015	0/56 (0%)					
Mach, 2020	2/39 (5.13%)					
Kiani, 2020		0.63%			1.98%	
Voigtlander, 2020	3/956 (0.3%)					
Need for second valve						
Rodes-Cabau, 2010	1/85 (1.2%)					
Permanent pacemaker						
Green, 2015		10/110 (9%)				
Koifman, 2015	12/238 (5%)					
Okoh, 2017	2/30 (6.67%)					
Puls, 2014	3/144 (2%)					
Rodes-Cabau, 2010		7/85 (8.2%)				
Yamamoto, 2015	5/56 (8.9%)					
Mach, 2020	5/39 (12.82%)					
Kiani, 2020		11.75%				
Sami, 2020	309/2865 (10.8%)					
Shimura, 2020	29/288 (10.07%)					
Percutaneous closure device failure						
Bogdan, 2016		10/79 (12.7%)				
Renal failure						
Green, 2015		9/110 (8%)				
Respiratory failure						
Huded, 2016		1/64 (2%)				
Readmission						
Green, 2015		4/110(4%)				
Huded, 2016		7/64 (11%)				
Patel, 2020		16/74 (21.6%)				
Kiani, 2020		3.69%				
Kundi, 2020					6492/13593 (47.76%)	
Shimura, 2020					64/288 (22.22%)	
Stroke						
Alfredsson, 2016		129/6100 (2.1%)				
Green, 2015		1/110 (1%)				
Huded, 2016		4/64 (6%)				
Koifman, 2015	11/238 (5%)					
Rodes-Cabau, 2010		3/85 (3.5%)				
Okoh, 2017	0/30 (0%)					
Shimura, 2017	6/353 (1.7%)					
Stortecky, 2012	2/24 (8.3%)					
Traynor, 2017	2/60 (3.3%)					
Yamamoto, 2015	3/56 (5.4%)					

Mach, 2020	1/39 (2.56%)					
Kiani, 2020		2.56%			5.70%	
Voigtlander, 2020	14/956 (1.5%)					
Shimura, 2020	2/288 (0.07%)					
Sepsis						
Rodes-Cabau, 2010		4/85 (4.7%)				
Voigtlander, 2020	22/956 (2.3%)					
Transfusion						
Green, 2012	24/76 (32.9%)					
Koifman, 2015	100/238 (43%)					
Puls, 2014	67/144 (47%)					
Valve embolization						
Rodes-Cabau, 2010	1/85 (1.2%)					
Vascular complications						
Bogdan, 2016		12/79 (15.18%)				
Voigtlander, 2020	43/956 (4.5%)					
Shimura, 2020	22/288 (7.64%)					
2-valve implantation						
Shimura, 2017	9/353 (2.55%)					
Yamamoto, 2015	1/56 (1.8%)					
Length of hospital stay for frail TAVI recipients, days						
Ghatak, 2012	12.1±8.4					
Green, 2012	9±6					
Huded, 2016	6±3.5					
Okoh, 2017	7±8					
Patel, 2016	9**					
Traynor, 2017	6.8±5.2					
Yamamoto, 2015	10.3±7.5					
Kiani, 2020	5 (3-8)					
Intensive care unit (ICU) stay, days						
Patel, 2016	2.7**					
Yamamoto, 2015	4.9±4					
Voigtlander, 2020	3.58±5.0					

*= median + IQR

**=mean without standard deviation reported