

Supplementary Table S1. Multivariate Cox regression analyses of futile events based on patients' baseline characteristics of preoperative factors. A hazard ratio (HR) above 1 increases the risk, below 1 decreases the risk of futility.

	Combined access				TF-TAVR			TA-TAVR				
	HR	95% CI		<i>p</i>	HR	95% CI		<i>p</i>	HR	95% CI		<i>p</i>
Dichotomic parameters												
Transapical access	1.569	0.987	2.493	0.057								
COPD	1.400	0.804	2.438	0.234								
Peripheral vascular disease	1.372	0.834	2.254	0.213				1.444	0.838	2.489	0.186	
Cerebrovascular disease	1.797	1.095	2.950	0.020				2.066	1.187	3.598	0.010	
Home oxygen dependence	2.500	0.766	8.160	0.129				5.591	1.620	19.295	0.006	
Wheel chair dependence					4.976	1.188	20.844	0.028				
Interval scaled parameters												
Logistic EuroSCORE									1.000	0.973	1.028	0.980
EuroSCORE II	1.014	0.971	1.058	0.528					1.050	0.979	1.126	0.175
Postinterventional mean Gradient	1.008	0.980	1.037	0.587								
Postinterventional max. Gradient	0.983	0.962	1.005	0.125								

Supplementary Table S2. Multivariate Cox regression analyses of futile events based on patients' procedural characteristics. A hazard ratio (HR) above 1 increases the risk, below 1 decreases the risk of futility.

	Combined access				TF-TAVR			TA-TAVR				
	HR	95% CI		<i>p</i>	HR	95% CI		<i>p</i>	HR	95% CI		<i>p</i>
Dichotomic parameters												
Predilatation necessary									1.461	0.763	2.798	0.253
Conversion to open surgery	3.800	0.856	16.863	0.079					5.579	0.700	44.483	0.105
Interval scaled parameters												
Contrast medium, cc					1.001	0.994	1.008	0.743				
Procedure time, min									1.001	0.995	1.007	0.767
Total hours in the ICU	1.001	0.998	1.005	0.410	1.006	1.002	1.010	<0.001	1.001	0.997	1.005	0.696
Total hours ventilated	1.004	0.996	1.013	0.299					1.004	0.995	1.014	0.330
Length of stay after TAVR days	1.019	0.999	1.039	0.065					1.029	1.007	1.052	0.011

Supplementary Table S3. Multivariate Cox regression analyses of futile events based on patients' VARC-2 adverse events. A hazard ratio (HR) above 1 increases the risk, below 1 decreases the risk of futility.

	Combined access				TF-TAVR				TA-TAVR			
	HR	95% CI		<i>p</i>	HR	95% CI		<i>p</i>	HR	95% CI		<i>p</i>
Dichotomic parameters												
Device success	0.693	0.175	2.745	0.601					0.228	0.085	0.613	0.003
30-day combined safety endpoint	0.048	0.016	0.151	<0.001	0.120	0.046	0.311	<0.001	0.075	0.029	0.198	<0.001
Acute kidney injury	1.294	0.394	4.254	0.671					0.623	0.220	1.768	0.374
New atrial fibrillation	1.575	0.619	4.007	0.341					1.184	0.515	2.723	0.690
Reoperation for non-cardiac problems	1.925	0.514	7.214	0.331					0.776	0.301	2.003	0.601

Reoperation for bleeding/tamponade	0.706	0.171	2.921	0.631					1.668	0.497	5.592	0.407
Pneumonia under antibiotic treatment									2.648	0.836	8.394	0.098
Major bleeding complication	0.721	0.200	2.596	0.617	2.764	0.990	7.717	0.052	0.168	0.052	0.540	0.003
New renal replacement therapy	0.063	0.005	0.834	0.036					3.620	0.743	17.629	0.111
Major vascular complication									2.034	0.450	9.189	0.356
Neurological adverse event	0.179	0.018	1.782	0.142	0.486	0.059	3.995	0.502	0.736	0.134	4.057	0.725
Reoperation for valvular dysfunction									0.479	0.084	2.743	0.409
Myocardial infarction	1.042	0.105	10.355	0.972					31.137	4.329	223.932	<0.001
Mean gradient post-implant	0.800	0.629	1.016	0.068	0.910	0.755	1.098	0.325				
Max. gradient post-implant	1.082	0.932	1.257	0.301	0.967	0.849	1.102	0.618				
Max. flow post-implant	0.640	0.268	1.529	0.315	1.026	0.278	3.785	0.969				