

Supplementary Online Content

Reardon MJ, Feldman TE, Meduri CU, et al. Two-year outcomes after transcatheter aortic valve replacement with mechanical vs self-expanding valves: the REPRISE III randomized clinical trial. *JAMA Cardiol*. Published online February 27, 2019.

doi:10.1001/jamacardio.2019.0091

eTable 1. Key baseline characteristics in REPRISE II

eTable 2. VARC-2 events between 0-1 and 1-2 years

eFigure. Mortality at 2 years in high-risk TAVR randomized trials

This supplementary material has been provided by the authors to give readers additional information about their work.

eTable 1. Key Baseline Characteristics in REPRISE III

	CoreValve (N = 305)	LOTUS (N = 607)
Age, years	82.9±7.6	82.8±7.1
Female sex, %	52.1	50.1
STS score, %	6.9±4.1	6.7±4.0
Atrial fibrillation, %	31.6	35.1
Pacemaker, %	19.0	17.8
Prior stroke, %	14.5	11.3
Aortic valve area (cm ²)	0.70±0.19 (280)	0.69±0.19 (541)
Mod/Severe Aortic regurgitation, %	8.0 (289)	6.5 (558)
Mean aortic gradient (mmHg)	43.9±12.3 (294)	44.6±13.4 (575)
Peak aortic gradient (mmHg)	72.4±18.1 (294)	73.6±20.8 (575)
Mod/Sev Mitral regurgitation, %	11.7 (283)	10.7 (554)
LVEF (%)	55.9±11.8 (254)	56.1±11.4 (485)

Numbers are n (%).

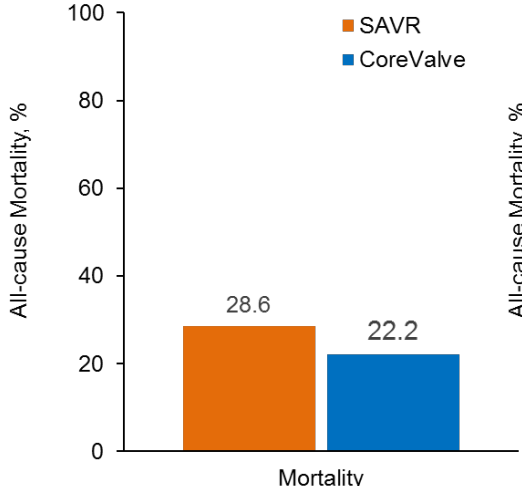
eTable 2. VARC-2 events between 0-1 and 1-2 years

	0-1 years			1-2 years		
	CoreValve (N=299)	Lotus (N=592)	<i>P</i> value	CoreValve (N=252)	Lotus (N=514)	<i>P</i> value
All-cause Mortality or Disabling Stroke	53 (17.7)	78 (13.2)	0.07	28 (11.1)	56 (10.9)	0.93
All-cause Mortality	40 (13.4)	70 (11.8)	0.51	25 (9.9)	53 (10.3)	0.87
Cardiovascular	29 (9.7)	45 (7.6)	0.28	16 (6.3)	34 (6.6)	0.89
Stroke	28 (9.4)	41 (6.9)	0.20	5 (2.0)	8 (1.6)	0.77
Disabling	21 (7.0)	21 (3.5)	0.02	4 (1.6)	6 (1.2)	0.74
Non-Disabling	7 (2.3)	21 (3.5)	0.33	1 (0.4)	2 (0.4)	>0.99
Major Vascular Complications	18 (6.0)	45 (7.6)	0.38	1 (0.4)	0 (0.0)	0.33
Permanent pacemaker implantation: All patients	55 (18.4)	201 (34.0)	<0.0001	6 (2.4)	1 (0.2)	0.006
Pacemaker-naïve patients	55 (22.9) (240)	201 (41.2) (488)	<0.0001	6 (2.9)	1 (0.2)	0.006
Bleeding	53 (17.7)	108 (18.2)	0.85	8 (3.2)	23 (4.5)	0.39

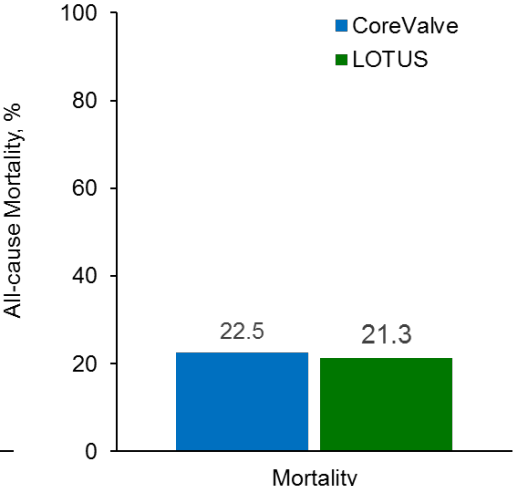
Life-threatening or Disabling	29 (9.7)	58 (9.8)	0.96	6 (2.4)	13 (2.5)	0.90
Myocardial Infarction	13 (4.3)	20 (3.4)	0.47	4 (1.6)	15 (2.9)	0.27
Repeat procedure for valve-related dysfunction	6 (2.0)	1 (0.2)	0.007	2 (0.8)	2 (0.4)	0.60
TAVR	5 (1.7)	0 (0.0)	0.004	1 (0.4)	0 (0.0)	0.33
Surgical AVR	0 (0.0)	1 (0.2)	>0.99	1 (0.4)	2 (0.4)	>0.99
Other	1 (0.3)	0 (0.0)	0.34	0 (0.0)	0 (0.0)	undef
Hospitalization	42 (14.0)	71 (12.0)	0.38	17 (6.7)	39 (7.6)	0.67
New onset of atrial fibrillation or atrial flutter	14 (4.7)	39 (6.6)	0.26	0 (0.0)	0 (0.0)	undef
Prosthetic aortic valve thrombosis	0 (0.0)	11 (1.9)	0.02	0 (0.0)	5 (1.0)	0.18

Binary event rates in the intention-to-treat patient population. Numbers are n (%). Hospitalization for valve-related symptoms or worsening congestive heart failure (NYHA class III or IV). Undef=undefined

A. CoreValve High Risk



B. REPRISE III



eFigure. Mortality at 2 years in high-risk TAVR Randomized Trials

Mortality at 2 years in the A) CoreValve High Risk trial and B) REPRISE III trial.