

Supplementary data

Supplementary Table 1. Univariate analysis on the presence of particles equal to or larger than 1,000 μm .

	Particles $\geq 1,000 \mu\text{m}$ OR (95% CI)	<i>p</i>-value
Baseline characteristics		
Male	0.67 (0.41-1.09)	0.11
Age, years	0.99 (0.96-1.03)	0.73
STS score, %	0.97 (0.88-1.06)	0.48
BMI, kg/m^2	1.04 (0.99-1.10)	0.12
Creatinine at baseline (umol/L)	0.997 (0.990-1.003)	0.34
Hypertension	1.05 (0.59-1.86)	0.86
Hypercholesterolaemia	0.90 (0.54-1.49)	0.68
PAD	0.83 (0.50-1.37)	0.46
Atrial fibrillation	0.81 (0.47-1.38)	0.43
History of stroke	0.96 (0.43-2.15)	0.93
History of TIA	0.88 (0.41-1.89)	0.75
Diabetes	0.78 (0.45-1.33)	0.36
Ischaemic heart disease	0.79 (0.48-1.31)	0.36
Previous AVR/TAVI	2.25 (0.86-5.90)	0.099
Femoral access	0.18 (0.02-2.04)	0.17
Predilatation	2.11 (1.03-4.32)	0.04
Post-dilatation	1.06 (0.59-1.89)	0.86
Moderate/severe LVOT calcification	1.02 (0.55-1.87)	0.96
Moderate/severe annulus calcification	0.96 (0.33-2.77)	0.94

Aortic valve Agatston score (per 10 increase)	1.001 (1.000-1.003)	0.077
(Functional) bicuspid valve	3.00 (1.53-5.85)	0.001
THV type used		
SAPIEN 3	1.00 (reference)	-
Evolut R/PRO	1.74 (0.94-3.22)	0.077
Lotus	2.45 (1.30-4.64)	0.006
Use of repositioning*	1.35 (0.77-2.39)	0.30

Results are displayed as OR (95% CI).

* Repositioning OR 1.02 (0.56-1.88), p=0.94 as tested only in Evolut R/PRO and Lotus THV patients.

AVR: aortic valve replacement; BMI: body mass index; LVOT: left ventricular outflow tract; PAD: peripheral arterial disease; STS: Society of Thoracic Surgeons; TAVI: transcatheter aortic valve implantation; THV: transcatheter heart valve; TIA: transient ischaemic attack

Supplementary Table 2. Univariate analysis on the presence of a greater than average amount of debris.

	More than average amount of material OR (95% CI)	<i>p</i>-value
Baseline characteristics		
Male	0.99 (0.57-1.71)	0.96
Age, years	0.98 (0.94-1.01)	0.17
STS score, %	0.99 (0.89-1.10)	0.85
BMI, kg/m ²	1.02 (0.98-1.06)	0.34
Creatinine at baseline (umol/L)	0.994 (0.994-1.002)	0.15
Hypertension	1.80 (0.90-3.63)	0.098
Hypercholesterolaemia	0.63 (0.36-1.11)	0.11
PAD	1.13 (0.64-1.99)	0.68
Atrial fibrillation	1.30 (0.73-2.33)	0.38
History of stroke	0.30 (0.09-1.04)	0.06
History of TIA	0.70 (0.27-1.80)	0.46
Diabetes	0.84 (0.46-1.53)	0.57
Ischaemic heart disease	0.82 (0.47-1.44)	0.49
Previous AVR/TAVI	1.06 (0.32-3.49)	0.93
Femoral access	0.75 (0.07-8.42)	0.82
Predilatation	1.26 (0.54-2.94)	0.59
Post-dilatation	1.24 (0.68-2.28)	0.48
Moderate/severe LVOT calcification	1.02 (0.53-1.96)	0.96
Moderate/severe annulus calcification	0.55 (0.19-1.60)	0.27

Aortic valve Agatston score (per 10 increase)	0.999 (0.997-1.001)	0.44
(Functional) bicuspid valve	1.14 (0.53-2.46)	0.73
THV type used		
SAPIEN 3	1.00 (reference)	-
Evolut R/PRO	1.95 (1.03-3.70)	0.04
Lotus	1.62 (0.72-3.63)	0.24
Use of repositioning*	2.81 (1.52-5.18)	0.001

Results are displayed as OR (95% CI).

* Repositioning OR 2.32 (1.23-4.38), p=0.009 as tested only in Evolut R/PRO and Lotus THV patients.

AVR: aortic valve replacement; BMI: body mass index; LVOT: left ventricular outflow tract; PAD: peripheral arterial disease; STS: Society of Thoracic Surgeons; TAVI: transcatheter aortic valve implantation; THV: transcatheter heart valve; TIA: transient ischaemic attack