Supplemental Material

Table S1. Frequency of multiple resheathing by center´s annual volume with SE-THV.

	Annual volume	% Multiple Resheathing	P value
Centers´ annual volume with SE-THV	≤ 25 cases/year	7.2%	
	25-75 cases/year	11.5%	0.05
	> 75 cases/year	6.9%	

SE-THV = self-expanding transcatheter heart valve

Table S2. Comparison of procedural and 30-day outcomes between the groups including only Evolut R and PRO cases.

	Overall (n=837)	NR (n=587)	SR (n=191)	MR (n=59)	P value
Procedural outcomes					
Device success	738 (88.2)	523 (89.1)	173 (90.6)	42 (71.2)	<0.001
Procedural death	26 (3.1)	20 (3.4)	3 (1.6)	3 (5.1)	0.3
Need of a second valve	19 (2.3)	3 (0.5)	6 (3.1)	10 (16.9)	<0.001
Prosthesis embolization	12 (1.4)	2 (0.3)	3 (1.6)	7 (11.9)	<0.001
Tamponade	13 (1.6)	9 (1.5)	4 (2.1)	0	0.52
Coronary obstruction	6 (0.7)	5 (0.9)	1 (0.5)	0	0.71
Aortic rupture	3 (0.4)	3 (0.5)	0	0	0.53
30-day outcomes					
All-cause death*	30 (3.7)	22 (3.8)	3 (1.7)	5 (8.6)	0.04
Early Safety	135 (16.1)	99 (16.9)	26 (13.6)	10 (16.9)	0.56
Stroke					
All stroke	21 (2.5)	17 (2.9)	3 (1.6)	1 (1.7)	0.54
Disabling Stroke	12 (1.4)	8 (1.4)	3 (1.6)	1 (1.7)	0.96
Major vascular complication	49 (5.9)	35 (6)	12 (6.3)	2 (3.5)	0.72
Life-threatening bleeding	34 (4.1)	24 (4.1)	9 (4.7)	1 (1.7)	0.6
Acute kidney injury (stages 2 and 3)	55 (6.6)	40 (6.9)	9 (4.7)	6 (10.2)	0.31
New permanent pacemaker	122 (14.8)	83 (14.4)	29 (15.3)	10 (17.2)	0.83
New-onset persistent LBBB	144 (17.7)	94 (16.5)	36 (19.4)	14 (24.1)	0.28
Moderate/severe aortic regurgitation	24 (3.1)	15 (2.8)	6 (3.4)	3 (5.6)	0.51
Mean aortic gradient, mmHg	8.8±5.6	8.7±5.5	8.3±4.8	11±8.2	0.02

*Kaplan-Meier events probability estimates (log rank). LBBB= left bundle branch block.

NR=no resheathing; SR=single resheathing; MR=multiple resheathing.

Table S3. Total number and percentage of cases included in the logistic regression analysis for multiple resheathing.

Univariable		Multivariable	
Variables	**N (%)**	**Variable**	**N (%)**
Aortic regurgitation*	1003 (97.8)	Aortic regurgitation*	1003 (97.8)
Balloon predilation	1026 (100)	Balloon predilation	1003 (97.8)
Evolut PRO†	1026 (100)	-	-
Portico†	1026 (100)	Portico†	1003 (97.8)

*Moderate or severe aortic regurgitation at baseline; †Evolut R/PRO as reference.

Table S4. Total number and percentage of cases included in the logistic regression analysis for device success.

Univariable		Multivariable	
Variables	**N (%)**	**Variable**	**N (%)**
COPD	1026 (100)	-	-
Aortic regurgitation*	1003 (97.8)	Aortic regurgitation*	1003 (97.8)
Balloon predilation	1026 (100)	-	-
Balloon postdilation	1026 (100)	-	-
Evolut PRO†	1026 (100)	-	-
Portico†	1026 (100)	Portico†	1003 (97.8)
Multiple resheathing	1026 (100)	Multiple resheathing	1003 (97.8)
SE-THV center annual volume <25 cases‡	1026 (100)	SE-THV center annual volume <25 cases‡	1003 (97.8)
SE-THV center annual volume 26-75 cases‡	1026 (100)	SE-THV center annual volume 26-75 cases‡	1003 (97.8)

COPD=Chronic obstructive pulmonary disease; SE-THV=Self-expanding transcatheter heart valve; *Moderate or severe aortic regurgitation at baseline; †Evolut R as the reference; ‡SE-THV center annual volume >75 as reference.

Table S5. Total number and percentage of cases included in the proportional hazard regression for the cumulative mortality at 1 year analysis for device success.

Univariable		Multivariable	
Variables	**N (%)**	**Variables**	**N (%)**
COPD	1026 (100)	COPD	1026 (100)
Afib*	1026 (100)	Afib*	1026 (100)
Cerebrovascular disease	1026 (100)	-	-
Aortic regurgitation†	1003 (97.8)	-	-
Evolut PRO‡	1026 (100)	-	-
Portico‡	1026 (100)	-	-
Multiple Resheathing	1026 (100)	Multiple resheathing	1026 (100)
SE-THV center annual volume <25 cases§	1026 (100)	SE-THV center annual volume <25 cases§	1026 (100)
SE-THV center annual volume 26-75 cases§	1026 (100)	SE-THV center annual volume 26-75 cases§	1026 (100)

COPD=Chronic obstructive pulmonary disease; SE-THV=Self-expanding transcatheter heart valve; *Afib= atrial fibrillation at baseline; †Moderate or severe aortic regurgitation at baseline; ‡Evolut R as the reference; §SE-THV center annual volume >75 as reference.

Figure S1. Comparison of Kaplan-Meier cumulative mortality curves at 1-year including only the Evolut R and PRO cases.