Tirado-Conte G, et al. *Thrombocytopenia after transcatheter aortic valve implantation*. *Rev Esp Cardiol. 2024*

SUPPLEMENTARY DATA

Propensity score-matched methodology

A nonparsimonious propensity score-matched analysis was performed between the 2 groups. A propensity score was estimated using a logistic regression model. The dependent variable was thrombocytopenia (yes/no); independent variables were those baseline characteristics found to have statistically significant differences between patients with and without thrombocytopenia and other variables considered to be clinically relevant. The final variables included in the propensity score matching were body surface area, diabetes mellitus, peripheral vascular disease, baseline eGFR, TAVR before 2015, transfemoral access, Portico THV, and major vascular complications.

A propensity score-matched cohort was then created with a 1:1 ratio using a "nearest neighbor" match without replacement. A caliper width of < 0.1 x the SD of the logistic score was applied. The appropriateness of the matching was assessed in several ways: smoothed Kernel density plots of the logistic score were computed to visually assess the balance between groups before and after matching (figure 2 of the supplementary data). Then, standardized mean differences (SMD) were calculated for all covariates (both those included and not included in the logistic score calculation) to assess for potential imbalances between thrombocytopenia and no-thrombocytopenia groups (table 4 of the supplementary data).

Tirado-Conte G, et al. Thrombocytopenia after transcatheter aortic valve implantation. Rev Esp Cardiol. 2024

Table 1 of the supplementary data . Independent predictors of 30-day mortality

	Univariable analysis OR (95% CI)	P	Multivariable analysis OR (95% CI)	P
Age*	1.35 (1.0-1.8)	0.043		
STS score	1.0 (1.0-1.1)	< .001		
Major vascular complication	7.5 (4.7-12.1)	< .001	4.0 (1.9-8.1)	< .001
Life-threatening and major bleeding	9.6 (6.3-14.5)	< .001		
Acute kidney injury				
Stage 1	3.5 (2.1-5.7)	< .001	3.0 (1.6-5.9)	.001
Stage 2	11.3 (4.8-26.5)	< .001	10.2 (3.2-32.3)	< .001
Stage 3	14.4 (7.2-28.6)	< .001	11.8 (4.8-29.1)	< .001
Periprocedural stroke	6.7 (3.5-12.8)	< .001	4.5 (1.8-11.7)	.002
Severe aortic regurgitation	7.4 (1.7-32.8)	.009	4.9 (1.0-24.1)	.049
Thrombocytopenia	4.6 (3.1-6.7)	< .001	2.3 (1.3-4.2)	.004
TAVR before 2015	2.02 (1.38-2.98)	< .001		

*Each 10-year increase.

Tirado-Conte G, et al. *Thrombocytopenia after transcatheter aortic valve implantation*. *Rev Esp Cardiol. 2024*

Table 2 of the supplementary data. In hospital outcomes among patients with thrombocytopenia

according to early and late nadir

	No TP (n = 2526)	Early nadir (n = 323)	Late nadir (n = 192)	P	P (no TP vs early TP)	P (early vs late TP)
Clinical endpoints						
30-day mortality	36 (1.5)	14 (4.4)	23 (12.1)	< .001	< .001	.001
Stroke	52 (2.1)	11 (3.4)	7 (3.7)	.140	.125	.874
Vascular complication	S					
Major vascular complication	83 (3.3)	42 (13.0)	18 (9.4)	< .001	< .001	.215
Minor vascular complication	235 (9.3)	50 (15.5)	20 (10.4)	.002	.001	.105
Bleeding complication	15					
Life-threatening	47 (1.9)	36 (11,2)	17 (8.9)	< .001	< .001	.402
Major	86 (3.4)	26 (8.1)	13 (6.8)	< .001	< .001	.589
Minor	229 (10.0)	49 (17.0)	20 (11.3)	.001	< .001	.095
ΑΚΙ						
Stage I	247 (10.1)	49 (15.7)	39 (21.0)		.001	< .001
Stage II	23 (0.9)	8 (2.6)	8 (4.3)			
Stage III	32 (1.3)	5 (1.6)	15 (8.1)			
Stage II or III	55 (2.2)	13 (4.2)	23 (12.4)	< .001	.039	.001
Any AKI	302 (12.3)	62 (19.9)	62 (33.3)	< .001	< .001	.001
New permanent PM implantation	426 (16.9)	71 (22.0)	57 (29.7)	< .001	.023	.050
Postprocedural AR						
Moderate	107 (4.4)	16 (5.0)	15 (8.5)	.038 .352		.362
Severe	9 (0.4)	2 (0.7)	3 (1.7)	.000	1002	
Postprocedural mean aortic valve gradient, mmHg	10.7 (5.7)	10.6 (5.2)	10.4 (6.7)	.480	.775	.701
Length of ICU stay, d	1 [0-2]	1 [0-2]	2 [0-5]		.001	< .001
Length of hospital stay, d	6 [5-8]	7 [6-11]	9 [6-14]		< .001	< .001

Tirado-Conte G, et al. *Thrombocytopenia after transcatheter aortic valve implantation*. *Rev Esp Cardiol. 2024*

Early safety (at 30 d)	1826 (73.8)	172 (53.9)	88 (45.8)	< .001	< .001	.077
Device success (at 30 d)	2175 (89.4)	239 (76.9)	136 (72.7)	< .001	< .001	.302

The data are expressed as No. (%) or median [interquartile range].

Table 3 of the supplementary data. Independent predictors of late thrombocytopenia

	Univariable analysis OR (95%CI)	Ρ	Multivariate analysis OR (95%CI)	Р
Age*	1.31 (1.04-1.65)	.020		
Body mass index, cm/m ²	0.97 (0.94-1.00)	.028		
Body surface area, m ²	0.19 (0.12-0.29)	< .001	0.34 (0.14-0.85)	.020
Atrial fibrillation	1.50 (1.19-2.14)	.002		
Baseline peak aortic gradient	0.99 (0.98-1.00)	.015		
Baseline eGFR**	1.19 (1.11-1.27)	< .001		
Previous myocardial infarction	1.82 (1.16-2.84)	.009		
STS score	1.04 (1.01-1.06)	.003	1.03 (1.01-1.06)	.019
Major vascular complication	2.25 (1.34-3.77)	.002		
Major or life-threatening bleeding	2.42 (1.60-3.67)	< .001	2.04 (1.20-3.47)	.008
Moderate-severe residual AR	2.20 (1.31-3.69)	.003	1.99 (1.08-3.70)	.028
Acute kidney injury stage 2 or 3	5.60 (3.42-9.27)	< .001	4.33 (2.24-8.38)	<.001

*Each 10-year increase.

** Each decrease of 10 mL/min/1.73m².

Tirado-Conte G, et al. Thrombocytopenia after transcatheter aortic valve implantation. Rev Esp Cardiol. 2024

	Postpropensity score mat		
	No thrombocytopenia	Thrombocytopenia	SMD
	(n = 543)	(n = 543)	
Age	81.5 ± 6.9	81.2 ± 6.6	0.035
Female sex	321 (59.1)	303 (55.8)	0.055
Body mass index, kg/m ²	27.3 ± 5.1	27.2 ± 4.9	0.023
Body surface area, m ²	1.72 ± 0.2	1.73 ± 0.2	-0.018
Diabetes	178 (32.8)	170 (31.3)	0.026
Hypertension	451 (83.2)	462 (85.1)	-0.042
Coronary artery disease	256 (47.3)	244 (45.2)	0.035
Previous CABG	72 (13.3)	71 (13.1)	0.003
Atrial fibrillation	210 (38.7)	195 (36.0)	0.044
Previous CVA	62 (11.5)	69 (12.9)	-0.035
COPD	91 (16.8)	110 (20.3)	-0.073
Peripheral vascular disease	116 (21.4)	119 (21.9)	-0.011
eGFR	55.1 ± 22.4	54.7 ± 24.1	0.016
STS score	6.1 ± 5.2	5.8 ± 5.1	0.058
LVEF, %	56.3 ± 12.4	55.9 ± 13.3	-0.028
Mean aortic gradient, mmHg	45.8 ± 16.0	45.3 ± 15.6	0.031
Aortic valve area, cm ²	0.68 ± 0.21	0.70 ± 0.33	-0.096
Moderate-to-severe MR	121 (22.9)	105 (19.6)	0.066
Year of TAVR	2017 [2015-2019]	2017 [2015-2019]	0.038
TAVR before 2015	172 (31.7)	178 (32.8)	-0.019
Portico, Abbott	105 (19.3)	99 (18.2)	0.023
Sapien, Edwards	334 (61.5)	368 (67.8)	-0.106
General anaesthesia	194 (51.7)	226 (56.8)	0.083
Prior balloon valvuloplasty	292 (54.1)	303 (55.8)	-0.028
Balloon postdilatation	93 (17.2)	96 (17.7)	-0.010
Major vascular complication	52 (9.6)	54 (9.9)	-0.010
Postprocedural severe AR	3 (0.6)	6 (1.2)	-0.057

Table 4 of the supplementary data. Standardized mean deviation after propensity score matching.

The data are presented as No. (%), mean ± standard deviation, or median [interquartile range].

Tirado-Conte G, et al. Thrombocytopenia after transcatheter aortic valve implantation. Rev Esp Cardiol. 2024

Table 5 of the supplementary data. Primary and secondary endpoints in the propensity score matched

cohort.

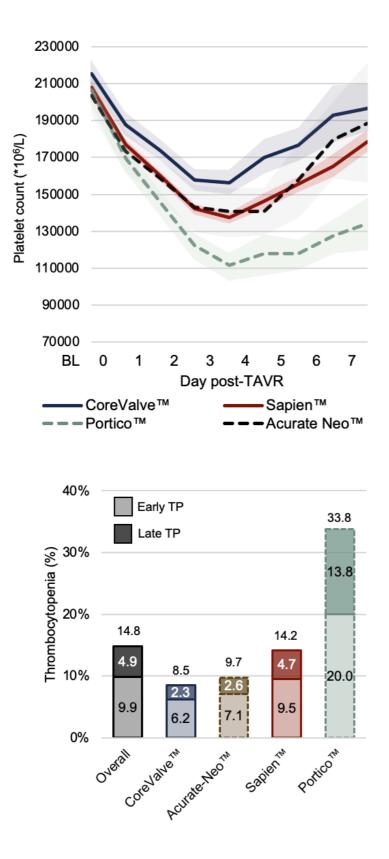
	Propensity score-matched col		
	No-thrombocytopenia	Thrombocytopenia	Ρ
	(n = 543)	(n = 543)	
30-day all-cause		20 (7 2)	. 001
mortality	13 (2.5)	39 (7.3)	< .001
Procedural safety	379 (71.4)	289 (53.6)	< .001
Two-year all-cause	16.7	29.2	< .001
mortality	10.7	23.2	× .001

The data are expressed as No. (%).

Tirado-Conte G, et al. *Thrombocytopenia after transcatheter aortic valve implantation*. *Rev Esp Cardiol. 2024*

Figure 1 of the supplementary data. Dynamics of platelets count and incidence of thrombocytopenia

according to type of THV.



Tirado-Conte G, et al. Thrombocytopenia after transcatheter aortic valve implantation. Rev Esp Cardiol. 2024

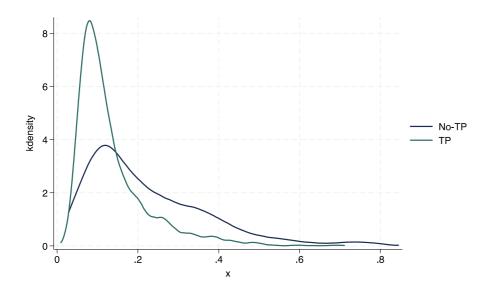
Correcciones a la figura

Indicar números en formato REC con espacio fino entre cifras de más de 4 dígitos

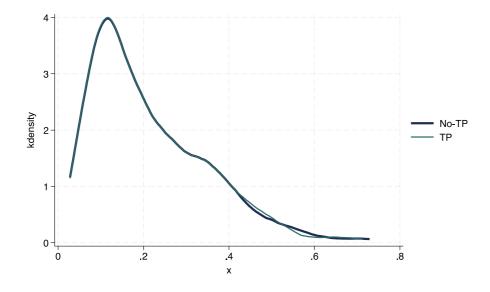
Tirado-Conte G, et al. *Thrombocytopenia after transcatheter aortic valve implantation*. *Rev Esp Cardiol. 2024*

Figure 2 of the supplementary data. Smoothed Kernel density plots.

Before propensity score matching.



After propensity score matching

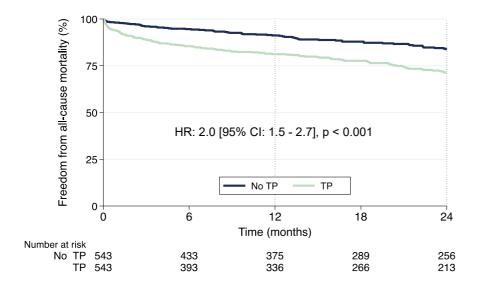


Tirado-Conte G, et al. *Thrombocytopenia after transcatheter aortic valve implantation*. *Rev Esp Cardiol. 2024*

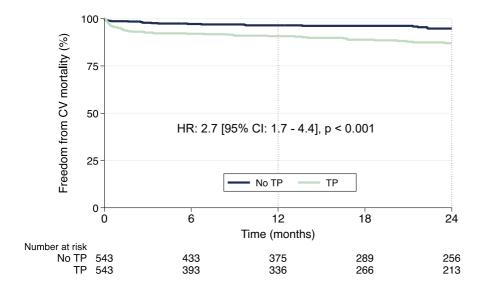
Figure 3 of the supplementary data. Two-year all-cause and cardiovascular mortality according to

thrombocytopenia in the propensity-score-matched cohort.

All-cause mortality



Cardiovascular mortality



Correcciones a la figura

Cerrar (95%CI)

Tirado-Conte G, et al. Thrombocytopenia after transcatheter aortic valve implantation. Rev Esp Cardiol. 2024

Indicar valores de P en formato REC