SUPPLEMENTARY MATERIAL

continuous scale and 1-year mortality and bleeding stratified according to platelet count > 450 000/μL at baseline

Supplementary Figure 7. Spline functions of relative changes in platelet count on a continuous scale and 1-year mortality and bleeding stratified according to platelet count < 100 000/μL at nadir

Supplementary Figure 8. Spline functions of relative changes in platelet count on a continuous scale and 1-year mortality and bleeding stratified according to platelet count > 450 000/μL at nadir

Supplementary Figure 9. Spline functions of relative changes in platelet count on a continuous scale and 1-year mortality and bleeding stratified according to platelet count < 150 000/μL at baseline

Supplementary Figure 10. Spline functions of relative changes in platelet count on a continuous scale and 1-year mortality and bleeding stratified according to platelet count > 400 000/μL at baseline

Supplementary Figure 11. Spline functions of relative changes in platelet count on a continuous scale and 1-year mortality and bleeding stratified according to platelet count < 150 000/μL at nadir

Supplementary Figure 12. Spline functions of relative changes in platelet count on a continuous scale and 1-year mortality and bleeding stratified according to platelet count > 400 000/μL at nadir

Supplementary Figure 13. Spline functions of relative changes in platelet count on a continuous scale and 1-year mortality and bleeding stratified according to randomization to radial access vs femoral access

Supplementary Figure 14. Spline functions of relative changes in platelet count on a

Supplementary Figure 24. Spline functions of absolute changes in platelet count and 1-year mortality and bleeding after excluding patients with low (< 100 000/μL) or high (> 450 000/μL) platelet counts at baseline and/or nadir

Supplementary Figure 25. Spline functions of relative changes in platelet count and 1-year mortality and bleeding after excluding patients receiving glycoprotein IIb/IIIa inhibitors

Supplementary Figure 26. Spline functions of absolute changes in platelet count and 1-year mortality and bleeding after excluding patients receiving glycoprotein IIb/IIIa inhibitors

Supplementary Table 1. Two-sided test of the scaled Schoenfeld residuals over time

Analysis	Outcome	Chi^2	df	*P*
RCS (percentage change)	Mortality	25.09	18	.123
	Bleeding	20.83	18	.288
3 Groups	Mortality	22.86	16	.118
	Bleeding	17.54	16	.352
7 Groups	Mortality	29.08	20	.086
	Bleeding	20.62	20	.420
RCS (absolute change)	Mortality	24.28	18	.146
	Bleeding	22.23	18	.222
RCS (percentage change) after excluding patients with thrombocytopenia (< 100 000/μL) or thrombocytosis (> 450 000/μL) at baseline and/or nadir	Mortality	24.26	18	.147
	Bleeding	18.28	18	.375
RCS (absolute change) after excluding patients with thrombocytopenia (< 100 000/μL) or thrombocytosis (> 450 000/μL) at baseline and/or nadir	Mortality	23.96	18	.157
	Bleeding	19.44	18	.365

RCS, restricted cubic splines

Supplementary Table 2. Baseline clinical characteristics of patients with and without qualifying platelet data

	Study population (n = 7722)	Incomplete platelet data (n = 657)
Randomization		
Radial vs femoral	7722	657
Radial	3846 (49.8)	341 (51.9)
Femoral	3876 (50.2)	316 (48.1)
Bivalirudin vs UFH	6687	502
Bivalirudin	3368 (50.4)	231 (46.0)
UFH	3319 (49.6)	271 (54.0)
Clinical Characteristics		
Age, y	65.7 ± 11.8	65.8 ± 12.2
Male sex	5703 (73.9)	454 (69.1)
BMI, kg/m^2	27.1 ± 4.1	27.2 ± 4.4
Diabetes mellitus	1755 (22.7)	142 (21.6)
Insulin dependent	427 (5.5)	36 (5.5)
Current smoking	2677 (34.7)	206 (31.4)
Hypercholesterolemia	3406 (44.1)	280 (42.6)
Hypertension	4905 (63.5)	388 (59.1)
Family history of CAD	2102 (27.2)	187 (28.5)
Previous MI	1108 (14.3)	93 (14.2)
Previous PCI	1100 (14.2)	94 (14.3)
Previous CABG	246 (3.2)	11 (1.7)
Previous stroke or TIA	381 (4.9)	42 (6.4)
Peripheral vascular disease	662 (8.6)	46 (7.0)
COPD	493 (6.4)	37 (5.6)
Renal failure	99 (1.3)	4 (0.6)
Dialysis	8 (0.1)	0 (0.0)
Killip class		
I	6994 (90.6)	590 (89.8)
II	516 (6.7)	45 (6.8)
III	153 (2.0)	11 (1.7)
IV	59 (0.8)	11 (1.7)
Clinical presentation		
Unstable angina	448 (5.8)	60 (9.1)
NSTEMI	3567 (46.2)	314 (47.8)
STEMI	3707 (48.0)	283 (43.1)
LVEF, %	51.1 ± 9.6	51.6 ± 9.4
Hemoglobin, g/dl	14.0 ± 1.8	13.7 ± 2.0
Platelet count, per 10^3/μL	229 ± 67	N=404, 223 ± 77
Thrombocytopenia (platelet count < 150 000/μL)	610 (7.9)	N=404, 43 (10.6)
Thrombocytosis	134 (1.7)	N=404, 9 (2.2)

(platelet count > 400 000/μL)		
WBC count, per $10^3/\mu L$	9.8 ± 3.5	9.6 ± 3.5
eGFR, ml/min/1.73 m^2	83.7 ± 25.5	85.5 ± 24.5
Medications at discharge		
Aspirin	7320 (95.5)	577 (93.2)
Clopidogrel	2818 (36.8)	193 (31.2)
Prasugrel	1475 (19.2)	73 (11.8)
Ticagrelor	2261 (29.5)	237 (38.3)
ACE inhibitors	5286 (69.0)	398 (64.3)
Angiotensin II receptor blockers	913 (11.9)	76 (12.3)
Statins	6994 (91.3)	536 (86.6)
Beta-blockers	6253 (81.6)	493 (79.6)
Warfarin	273 (3.6)	16 (2.6)
Proton pump inhibitors	6747 (88.0)	504 (81.4)
Procedure		
Coronary angiography completed	7720 (100.0)	650 (98.9)
CABG	264 (3.4)	45 (6.8)
Patient with significant lesion and medical treatment	868 (11.2)	121 (18.4)
Patient without significant lesion	328 (4.2)	37 (5.6)
PCI attempted	6261 (81.1)	447 (68.6)
Patient died during PCI	0 (0.0)	2 (0.3)
PCI completed	6261 (81.1)	445 (67.7)
IABP	172 (2.2)	13 (2.0)
Total amount of injected contrast, mL	166 ± 84	156 ± 98
Duration of procedure, min	50 ± 28	50 ± 28
Medications in the catheterization laboratory		
Clopidogrel	489 (6.3)	31 (4.7)
Prasugrel	604 (7.8)	19 (2.9)
Ticagrelor	688 (8.9)	85 (12.9)
Glycoprotein IIb/IIIa inhibitor	1036 (13.4)	55 (8.4)
Adenosine	241 (3.1)	19 (2.9)
Nitroprussiate	137 (1.8)	6 (0.9)
PCIs	6261	445
TIMI 3 flow post-procedure in all treated lesions	6010 (96.0)	418 (93.9)
Coronary stenosis after PCI < 30% in all treated lesions	6042 (96.5)	419 (94.2)
Procedural success in all treated lesions	5879 (93.9)	404 (90.8)
*Partial procedural success**	113 (1.8)	11 (2.5)
Procedural failure	139 (2.2)	18 (4.0)
Treated vessel(s)		
Left main coronary artery	247 (3.9)	22 (4.9)
	3087 (49.3)	212 (47.6)

Left circumflex artery	1660 (26.5)	138 (31.0)
Right coronary artery	2076 (33.2)	135 (30.3)
Bypass graft	53 (0.8)	2 (0.4)
≥ 2 vessels treated	787 (12.6)	59 (13.3)
Lesion(s) treated per patient		
1	4940 (79.0)	344 (77.3)
2	1075 (17.2)	85 (19.1)
≥ 3	242 (3.9)	16 (3.6)
Number of stents per patient	1.4 ± 0.9	1.4 ± 0.9
Overall stent length per patient, mm	31.7 ± 19.5	30.4 ± 19.4

ACE, angiotensin-converting enzyme; BMI, body mass index; CABG, coronary artery bypass grafting; CAD, coronary artery disease; COPD, chronic obstructive pulmonary disease; eGFR, estimated glomerular filtration rate; IABP, intra-aortic balloon pump; LVEF, left ventricular ejection fraction; MI, myocardial infarction; NSTEMI, non–ST-elevation myocardial infarction; PCI, percutaneous coronary intervention; STEMI, ST-elevation myocardial infarction; TIA, transient ischemic attack; TIMI, Thrombolysis in Myocardial Infarction; WBC, white blood cell.

The data are expressed as No. (%) or mean ± standard deviation.

*TIMI 3 flow and coronary stenosis less than 30% in at least 1 lesion.

Supplementary Table 3. Baseline clinical characteristics of patients stratified into seven groups according to platelet count change and its severity

	Drop > 50% (n = 84)	Drop 30%-50% (n = 419)	Drop 10%-30% (n = 3168)	Reference (n = 3562)	Increase 10%-30% (n = 399)	Increase 30%-50% (n = 59)	Increase >50% (n = 31)	*P*
Randomization								
Radial vs femoral	84	419	3168	3562	399	59	31	
Radial	42 (50.0)	203 (48.4)	1538 (48.5)	1794 (50.4)	218 (54.6)	31 (52.5)	20 (64.5)	
Femoral	42 (50.0)	216 (51.6)	1630 (51.5)	1768 (49.6)	181 (45.4)	28 (47.5)	11 (35.5)	
Bivalirudin vs UFH	69	367	2838	3015	328	44	26	
Bivalirudin	28 (40.6)	166 (45.2)	1473 (51.9)	1496 (49.6)	170 (51.8)	25 (56.8)	10 (38.5)	
UFH	41 (59.4)	201 (54.8)	1365 (48.1)	1519 (50.4)	158 (48.2)	19 (43.2)	16 (61.5)	
Clinical characteristics								
Age, yrs	71.0 ± 1.8	67.3 ± 11.6	65.5 ± 11.7	65.3 ± 11.9	68.0 ± 11.9	69.9 ± 11.5	66.6 ± 9.8	< .001
Male sex	54 (64.3)	287 (68.5)	2,331 (73.6)	2,684 (75.4)	286 (71.7)	38 (64.4)	23 (74.2)	.006
BMI, kg/m^2	26.6 ± 3.5)	26.6 ± 4.0	26.9 ± 4.0	27.3 ± 4.2	27.2 ± 4.3	26.6 ± 3.3	26.1 ± 4.3	< .001
Diabetes mellitus	21 (25.0)	97 (23.2)	662 (2.9)	849 (23.8)	102 (25.6)	16 (27.1)	8 (25.8)	.075
Insulin dependent	7 (8.3)	26 (6.2)	158 (5.0)	204 (5.7)	23 (5.8)	5 (8.5)	4 (12.9)	.243
Current smoking	15 (17.9)	150 (35.8)	1,123 (35.4)	1,262 (35.4)	100 (25.1)	15 (25.4)	12 (38.7)	< .001
Hypercholesterolemia	26 (31.0)	174 (41.5)	1,400 (44.2)	1,607 (45.1)	162 (4.6)	24 (4.7)	13 (41.9)	.094
Hypertension	54 (64.3)	265 (63.2)	1,989 (62.8)	2,271 (63.8)	269 (67.4)	41 (69.5)	16 (51.6)	.392
Family history of CAD	18 (21.4)	109 (26.0)	849 (26.8)	1,012 (28.4)	92 (23.1)	12 (2.3)	10 (32.3)	.131
Previous MI	12 (14.3)	56 (13.4)	443 (14.0)	530 (14.9)	60 (15.0)	5 (8.5)	2 (6.5)	.560
Previous PCI	14 (16.7)	48 (11.5)	448 (14.1)	526 (14.8)	60 (15.0)	3 (5.1)	1 (3.2)	.081
Previous CABG	2 (2.4)	13 (3.1)	88 (2.8)	121 (3.4)	19 (4.8)	2 (3.4)	1 (3.2)	.466
Previous stroke or TIA	6 (7.1)	18 (4.3)	163 (5.1)	168 (4.7)	19 (4.8)	5 (8.5)	2 (6.5)	.724

Peripheral vascular disease	9 (1.7)	41 (9.8)	242 (7.6)	313 (8.8)	44 (11.0)	8 (13.6)	5 (16.1)	.057
COPD	11 (13.1)	43 (1.3)	168 (5.3)	239 (6.7)	25 (6.3)	3 (5.1)	4 (12.9)	< .001
Renal failure	2 (2.4)	8 (1.9)	36 (1.1)	44 (1.2)	8 (2.0)	0 (.0)	1 (3.2)	.419
Dialysis	1 (1.2)	2 (.5)	1 (.0)	3 (.1)	1 (.3)	0 (.0)	0 (.0)	.007
Killip class								< .001
I	64 (76.2)	350 (83.5)	2,905 (91.7)	3,246 (91.1)	357 (89.5)	49 (83.1)	23 (74.2)	
II	8 (9.5)	43 (1.3)	178 (5.6)	244 (6.9)	27 (6.8)	9 (15.3)	7 (22.6)	
III	5 (6.0)	14 (3.3)	65 (2.1)	56 (1.6)	11 (2.8)	1 (1.7)	1 (3.2)	
IV	7 (8.3)	12 (2.9)	20 (.6)	16 (.4)	4 (1.0)	0 (.0)	0 (.0)	
Clinical presentation								< .001
Unstable angina	2 (2.4)	13 (3.1)	165 (5.2)	244 (6.9)	21 (5.3)	2 (3.4)	1 (3.2)	
NSTEMI	24 (28.6)	119 (28.4)	1,266 (4.0)	1,857 (52.1)	253 (63.4)	35 (59.3)	13 (41.9)	
STEMI	58 (69.0)	287 (68.5)	1,737 (54.8)	1,461 (41.0)	125 (31.3)	22 (37.3)	17 (54.8)	
LVEF, %	43.9 ± 13.5	47.4 ± 11.4	5.8 ± 9.5	51.8 ± 9.2	51.8 ± 9.2	49.2 ± 1.5)	47.6 ± 9.2	< .001
Hemoglobin, g/dL	13.5 ± 2.38	14.1 ± 2.0	14.3 ± 1.7	13.9 ± 1.7	13.4 ± 1.91	13.0 ± 2.3	13.3 ± 2.3	< .001
Platelet count, per $10^3/\mu L$	282 ± 88	266 ± 85	238 ± 65	220 ± 63	194 ± 56.9	187 ± 65	164 ± 58.2	< .001
Thrombocytopenia (platelet count < 150 000/μL)	3 (3.6)	18 (4.3)	152 (4.8)	314 (8.8)	88 (22.1)	19 (32.2)	16 (51.6)	< .001
Thrombocytosis (platelet count > 400 000/μL)	11 (13.1)	24 (5.7)	63 (2.0)	34 (1.0)	2 (.5)	0 (.0)	0 (.0)	< .001
WBC count, per $10^3/\mu L$	12.4 ± 6.1	11.4 ± 4.4	1.0 ± 3.3	9.4 ± 3.2	9.0 ± 3.3	1.2 ± 3.7	1.3 ± 3.4	< .001
eGFR, mL/min/1.73 m^2	73.7 ± 29.1	77.5 ± 28.2	83.0 ± 24.7	85.4 ± 25.3	83.8 ± 28.5	81.1 ± 23.2	82.4 ± 28.0	< .001

Medications at discharge								
Aspirin	64 (85.3)	378 (93.3)	3,038 (96.2)	3,390 (95.7)	369 (93.7)	52 (89.7)	29 (96.7)	< .001
Clopidogrel	30 (4.0)	154 (38.0)	1,175 (37.2)	1,278 (36.1)	152 (38.6)	21 (36.2)	8 (26.7)	.745
Prasugrel	8 (1.7)	85 (21.0)	719 (22.8)	609 (17.2)	40 (1.2)	7 (12.1)	7 (23.3)	< .001
Ticagrelor	14 (18.7)	99 (24.4)	866 (27.4)	1,121 (31.6)	138 (35.0)	14 (24.1)	9 (3.0)	< .001
ACE inhibitors	43 (57.3)	275 (67.9)	2,198 (69.6)	2,460 (69.4)	249 (63.2)	38 (65.5)	23 (76.7)	.040
Angiotensin II receptor blockers	9 (12.0)	41 (1.1)	343 (1.9)	458 (12.9)	53 (13.5)	7 (12.1)	2 (6.7)	.137
Statins	60 (8.0)	364 (89.9)	2,928 (92.7)	3,220 (9.9)	347 (88.1)	48 (82.8)	27 (9.0)	< .001
Beta-blockers	57 (76.0)	326 (8.5)	2,615 (82.8)	2,868 (8.9)	313 (79.4)	47 (81.0)	27 (9.0)	.197
Warfarin	6 (8.0)	20 (4.9)	110 (3.5)	117 (3.3)	18 (4.6)	2 (3.4)	0 (.0)	.145
Proton pump inhibitors	71 (94.7)	358 (88.4)	2,761 (87.4)	3,129 (88.3)	349 (88.6)	52 (89.7)	27 (9.0)	.555
Procedure								
Coronary angiography completed	84 (10.0)	418 (99.8)	3,167 (10.0)	3,562 (10.0)	399 (10.0)	59 (10.0)	31 (10.0)	.208
CABG	13 (15.5)	35 (8.4)	91 (2.9)	106 (3.0)	13 (3.3)	5 (8.5)	1 (3.2)	< .001
Patient with significant lesion and medical treatment	5 (6.0)	23 (5.5)	292 (9.2)	471 (13.2)	62 (15.5)	12 (2.3)	3 (9.7)	< .001
Patient without significant lesion	3 (3.6)	15 (3.6)	106 (3.3)	178 (5.0)	20 (5.0)	4 (6.8)	2 (6.5)	.033
PCI attempted	63 (75.0)	345 (82.3)	2,679 (84.6)	2,807 (78.8)	304 (76.2)	38 (64.4)	25 (8.6)	< .001
Patient died during PCI	0 (.0)	0 (.0)	0 (.0)	0 (.0)	0 (.0)	0 (.0)	0 (.0)	1.000
PCI completed	63 (75.0)	345 (82.3)	2,679 (84.6)	2,807 (78.8)	304 (76.2)	38 (64.4)	25 (8.6)	< .001
IABP	14 (22.2)	40 (11.6)	37 (1.4)	36 (1.3)	2 (.7)	0 (.0)	1 (4.0)	< .001
Total amount of injected contrast, mL	173 ± 111	160 ± 77	168 ± 82	164 ± 86	166 ± 86	164 ± 87	159 ± 84	.403

Duration of procedure, min	58 ± 33	52 ± 30	49 ± 27	49 ± 29	48 ± 29	50 ± 30	54 ± 31.0	.028
Medications in the catheterization laboratory								
Clopidogrel	9 (1.7)	31 (7.4)	213 (6.7)	203 (5.7)	28 (7.0)	4 (6.8)	1 (3.2)	.270
Prasugrel	8 (9.5)	21 (5.0)	288 (9.1)	259 (7.3)	24 (6.0)	3 (5.1)	1 (3.2)	.010
Ticagrelor	10 (11.9)	42 (1.0)	258 (8.1)	323 (9.1)	45 (11.3)	4 (6.8)	6 (19.4)	.082
Glycoprotein IIb/IIIa inhibitor	21 (25.0)	83 (19.8)	431 (13.6)	441 (12.4)	51 (12.8)	3 (5.1)	6 (19.4)	< .001
Adenosine	2 (2.4)	18 (4.3)	115 (3.6)	98 (2.8)	5 (1.3)	3 (5.1)	0 (.0)	.047
Nitroprussiate	2 (2.4)	13 (3.1)	73 (2.3)	43 (1.2)	6 (1.5)	0 (.0)	0 (.0)	.007
PCIs	63	345	2,679	2,807	304	38	25	
TIMI 3 flow postprocedure in all treated lesions	58 (92.1)	317 (91.9)	2,573 (96.0)	2,709 (96.5)	295 (97.0)	34 (89.5)	24 (96.0)	< .001
Coronary stenosis after PCI < 30% in all treated lesions	58 (92.1)	330 (95.7)	2,591 (96.7)	2,712 (96.6)	290 (95.4)	36 (94.7)	25 (10.0)	.299
Procedural success in all treated lesions	57 (9.5)	311 (9.1)	2,514 (93.8)	2,654 (94.5)	285 (93.8)	34 (89.5)	24 (96.0)	.038
*Partial procedural success**	0 (.0)	7 (2.0)	42 (1.6)	57 (2.0)	6 (2.0)	1 (2.6)	0 (.0)	.735
Procedural failure	3 (4.7)	12 (3.5)	57 (2.1)	59 (2.1)	6 (2.0)	2 (5.3)	0 (.0)	.333
Treated vessel(s)								
Left main coronary artery	8 (12.7)	25 (7.2)	99 (3.7)	96 (3.4)	15 (4.9)	2 (5.3)	2 (8.0)	< .001
Left anterior descending artery	33 (52.4)	189 (54.8)	1,309 (48.9)	1,374 (48.9)	149 (49.0)	20 (52.6)	13 (52.0)	.546
Left circumflex artery	16 (25.4)	65 (18.8)	681 (25.4)	794 (28.3)	89 (29.3)	9 (23.7)	6 (24.0)	.006

Right coronary artery	24 (38.1)	113 (32.8)	902 (33.7)	906 (32.3)	106 (34.9)	16 (42.1)	9 (36.0)	.692
Bypass graft	0 (.0)	5 (1.4)	15 (.6)	28 (1.0)	5 (1.6)	0 (.0)	0 (.0)	.220
≥2 vessels treated	12 (19.0)	43 (12.5)	299 (11.2)	369 (13.1)	53 (17.4)	8 (21.1)	3 (12.0)	.009
Lesion(s) treated per patient								.173
1	50 (79.4)	284 (82.6)	2,147 (8.1)	2,188 (78.0)	223 (73.6)	28 (73.7)	20 (8.0)	
2	12 (19.0)	48 (14.0)	433 (16.2)	502 (17.9)	69 (22.8)	8 (21.1)	3 (12.0)	
≥ 3	1 (1.6)	12 (3.5)	99 (3.7)	115 (4.1)	11 (3.6)	2 (5.3)	2 (8.0)	
Number of stents per patient	1.6 ± 1.2	1.4 ± .9	1.4 ± .9	1.4 ± .8	1.6 ± 1.0	1.5 ± .9	1.6 ± 1.1	.062
Overall stent length per patient (mm)	36 ± 23	32 ± 20	31 ± 20	32 ± 19	35 ± 22	33 ± 21	36 ± 25	.042

ACE, angiotensin-converting enzyme; BMI, body mass index; CABG, coronary artery bypass grafting; CAD, coronary artery disease; COPD, chronic obstructive pulmonary disease; eGFR, estimated glomerular filtration rate; IABP, intra-aortic balloon pump; LVEF, left ventricular ejection fraction; MI, myocardial infarction; NSTEMI, non-ST-elevation myocardial infarction; PCI, percutaneous coronary intervention; STEMI, ST-elevation myocardial infarction; TIA, transient ischemic attack; TIMI, Thrombolysis in Myocardial Infarction; WBC, white blood cell.

The data are expressed as No. (%) or mean ± standard deviation.

*TIMI 3 flow and coronary stenosis less than 30% in at least 1 lesion.

Supplementary Table 4. Multivariate predictors of platelet count changes > 30%

	Platelet count drop > 30%		Platelet count increase > 30%	
	OR_{adj} (95% CI)	*P*	OR_{adj} (95% CI)	*P*
Age, y	1.02 (1.01-1.03)	.005	0.99 (0.97-1.02)	.592
BMI, per kg/m²	1.00 (0.97-1.03)	.944	0.97 (0.91-1.03)	.278
Male sex	1.02 (0.79.1.33)	.882	0.68 (0.37-1.24)	.207
Diabetes mellitus	0.99 (0.76-1.28)	.909	0.89 (0.49-1.62)	.707
Peripheral vascular disease	1.19 (0.82-1.73)	.360	0.85 (0.35-2.07)	.725
COPD	1.87 (1.29-2.69)	.001	0.84 (0.31-2.31)	.737
Killip class				
I	Reference		Reference	
II	1.16 (0.80-1.68)	.422	1.96 (0.92-4.15)	.080
III	1.16 (0.62-2.16)	.645	1.53 (0.34-6.89)	.582
IV	1.37 (0.64-2.93)	.414	-	-
STEMI at presentation	2.81 (2.15-3.66)	< .001	1.24 (0.73-2.10)	.432
Baseline hemoglobin values, per g/dL	1.02 (0.96-1.08)	.599	0.83 (0.73-0.96)	.010
Baseline platelet count, per 1000/μL	1.01 (1.00-1.01)	< .001	0.98 (0.98-0.99)	< .001
Baseline white blood cell count, per 1000/μL	1.07 (1.05-1.10)	< .001	1.06 (1.01-1.12)	.032
eGFR, per mL/min/1.73 m²	0.99 (0.98-0.99)	< .001	1.00 (0.99-1.01)	.977
CABG	13.00 (4.97-34.02)	< .001	1.20 (0.12-11.73)	.878
IABP	6.23 (3.95-9.82)	< .001	-	-
PCI completed	1.68 (0.99-2.85)	.054	0.64 (0.25-1.60)	.336
Total amount of injected contrast, per mL	1.00 (0.99-1.00)	.553	1.00 (0.99-1.00)	.403
Radial access (randomization)	0.86 (0.70-1.07)	.174	1.62 (0.98-2.67)	.060
Bivalirudin (randomization)	0.78 (0.62-0.98)	.031	0.91 (0.55-1.50)	.702
$P2Y_{12}$ inhibitor in the cath lab				
No	Reference		Reference	
Clopidogrel	1.19 (0.80-1.75)	.388	1.03 (0.40-2.66)	.951
Ticagrelor	0.92 (0.65-1.27)	.584	1.49 (0.73-3.06)	.273
Prasugrel	0.66 (0.44-1.01)	.055	0.77 (0.27-2.24)	.633
GP IIb/IIIa inhibitor in the cath lab	1.23 (0.92-1.63)	.156	0.70 (0.31-1.56)	.380

BMI, body mass index; CABG, coronary artery bypass grafting; cath lab, catheterization laboratory; COPD, chronic obstructive pulmonary disease; eGFR, estimated glomerular filtration rate; GP, glycoprotein; IABP, intra-aortic balloon pump; $OR_{adj,}$ adjusted odds ratio; PCI, percutaneous coronary intervention; STEMI, ST-elevation myocardial infarction.

Supplementary Table 5. Multivariable association of alternative platelet count thresholds (< 150 000/μL and > 400 000/μL) and mortality and bleeding

	Mortality			Bleeding		
	Rate, %	HR_{adj} (95% CI)	*P*	Rate, %	HR_{adj} (95% CI)	*P*
Baseline platelet count						
< 150 000/μL	4.9	0.93 (0.63-1.37)	.717	9.7	1.13 (0.86-1.48)	.383
150 000-400 000/ μL	3.4	Reference		7.6	Reference	
> 400 000/μL	7.5	1.10 (0.57-2.11)	.777	14.2	1.51 (0.95-2.40)	.081
Nadir platelet count						
< 150 000/μL	6.1	1.32 (1.00-1.74)	.050	11.9	1.53 (1.26-1.86)	< .001
150 000-400 000/μL	3.0	Reference		7.1	Reference	
> 400 000/μL	8.3	1.44 (0.58-3.56)	.430	10.0	1.11 (0.49-2.49)	.809

HR_{adj}, adjusted hazard ratio.

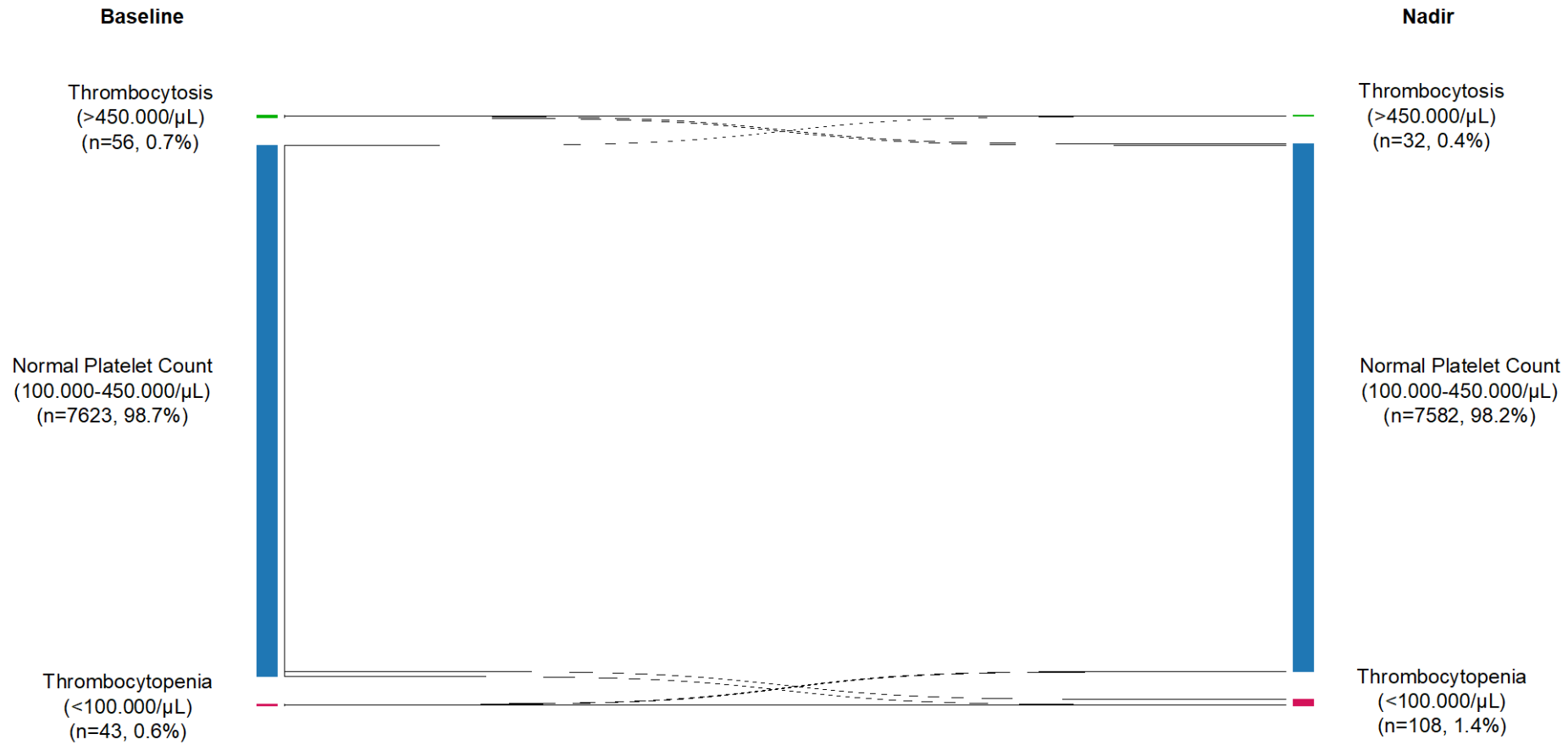
Supplementary Table 6. Causes of mortality across groups of platelet **count changes**

Groups	Cause of death
Drop >10%	*Cardiovascular (n = 85, 55.9%)* - Acute MI (n = 31, 20.4%) - Sudden cardiac death (n = 24, 15.8%) - Heart failure (n = 19, 12.5%) - Stroke (n = 2, 1.3%) - CV hemorrhage (n = 2, 1.3%) - CV procedure (n = 3, 2.0%) - Other CV causes (n = 4, 2.6%) *Noncardiovascular (n = 41, 27.0%)* - Non-CV hemorrhage (n = 2, 1.3%) - Non-CV procedure or surgery (n = 0, 0.0%) - Trauma (n = 0, 0.0%) - Suicide (n = 0, 0.0%) - Malignancy (n = 14, 9.2%) - Pulmonary (n = 9, 5.9%) - Renal (n = 2, 1.3%) - Gastro-intestinal (n = 5, 3.3%) - Hepatobiliary (n = 1, 0.7%) - Pancreatic (n = 0, 0.0%) - Infection (n = 7, 4.6%) - Neurological (n = 1, 0.7%) *Unknown (n = 26, 17.1%)*
Reference	*Cardiovascular (n = 51, 56.0%)* - Acute MI (n = 16, 17.6%) - Sudden cardiac death (n = 6, 6.6%) - Heart failure (n = 14, 15.4%) - Stroke (n = 4, 4.4%) - CV hemorrhage (n = 5, 5.5%) - CV procedure (n = 4, 4.4%) - Other CV causes (n = 2, 2.2%) *Noncardiovascular (n = 25, 27.5%)* - Non-CV hemorrhage (n = 0, 0.0%) - Non-CV procedure or surgery (n = 0, 0.0%) - Trauma (n = 2, 2.2%) - Suicide (n = 1, 1.1%) - Malignancy (n = 10, 11.0%) - Pulmonary (n = 4, 4.4%) - Renal (n = 1, 1.1%) - Gastro-intestinal (n = 1, 1.1%) - Hepatobiliary (n = 0, 0.0%) - Pancreatic (n = 0, 0.0%) - Infection (n = 6, 6.6%) - Neurological (n = 0, 0.0%) *Unknown (n = 15, 16.5%)*
Increase >10%	*Cardiovascular (n = 16, 51.6%)* - Acute MI (n = 6, 19.4%) - Sudden cardiac death (n = 3, 9.7%) - Heart failure (n = 1, 3.2%) - Stroke (n = 1, 3.2%)

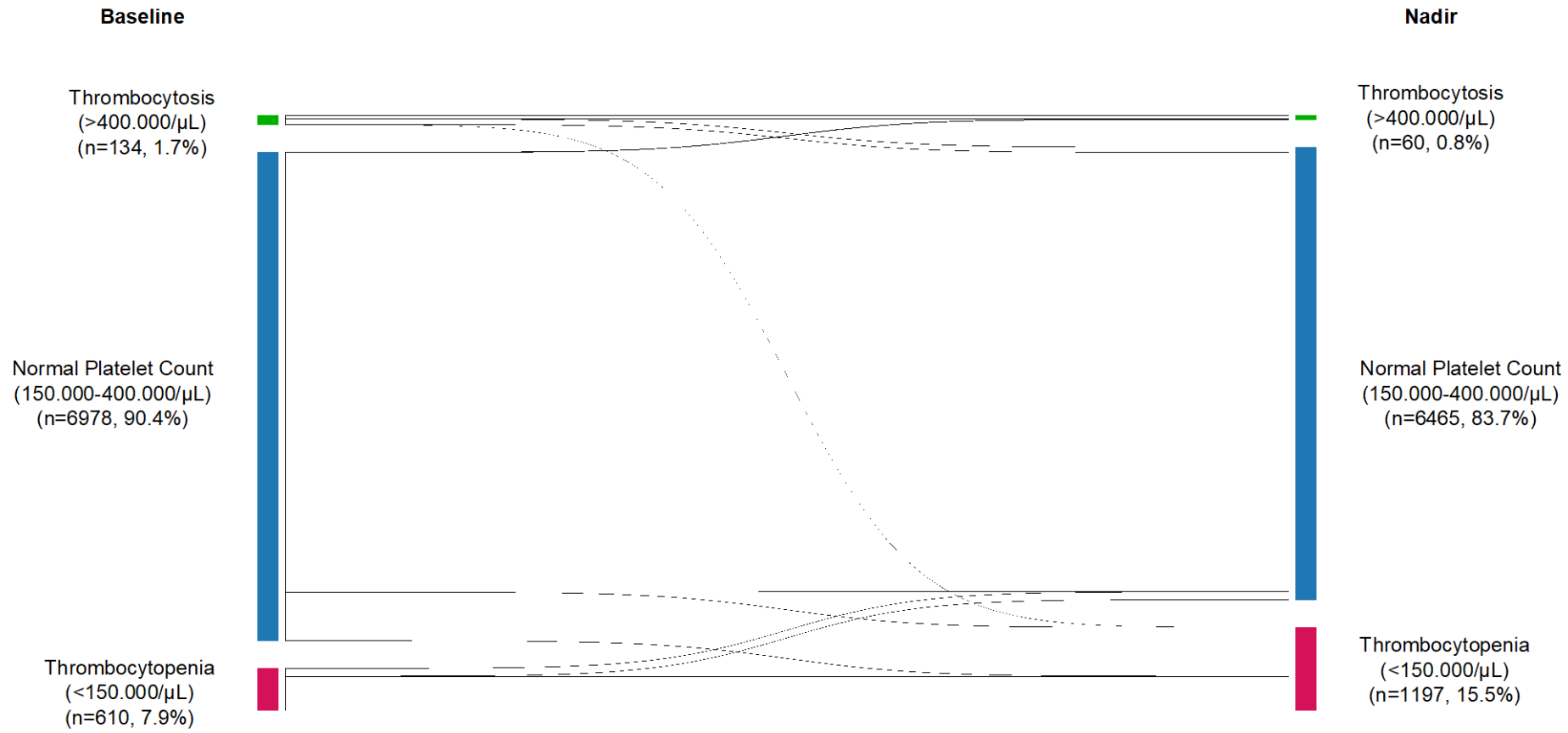
	- CV hemorrhage (n = 0, 0.0%) - CV procedure (n = 3, 9.7%) - Other CV causes (n = 2, 6.5%) *Noncardiovascular (n = 9, 29.0%)* - Non-CV hemorrhage (n = 0, 0.0%) - Non-CV procedure or surgery (n = 1, 3.2%) - Trauma (n = 0, 0.0%) - Suicide (n = 0, 0.0%) - Malignancy (n = 2, 6.5%) - Pulmonary (n = 1, 3.2%) - Renal (n = 0, 0.0%) - Gastro-intestinal (n = 0, 0.0%) - Hepatobiliary (n = 0, 0.0%) - Pancreatic (n = 1, 3.2%) - Infection (n = 4, 12.9%) - Neurological (n = 0, 0.0%) *Unknown (n = 6, 19.4%)*

CV, cardiovascular; MI, myocardial infarction.

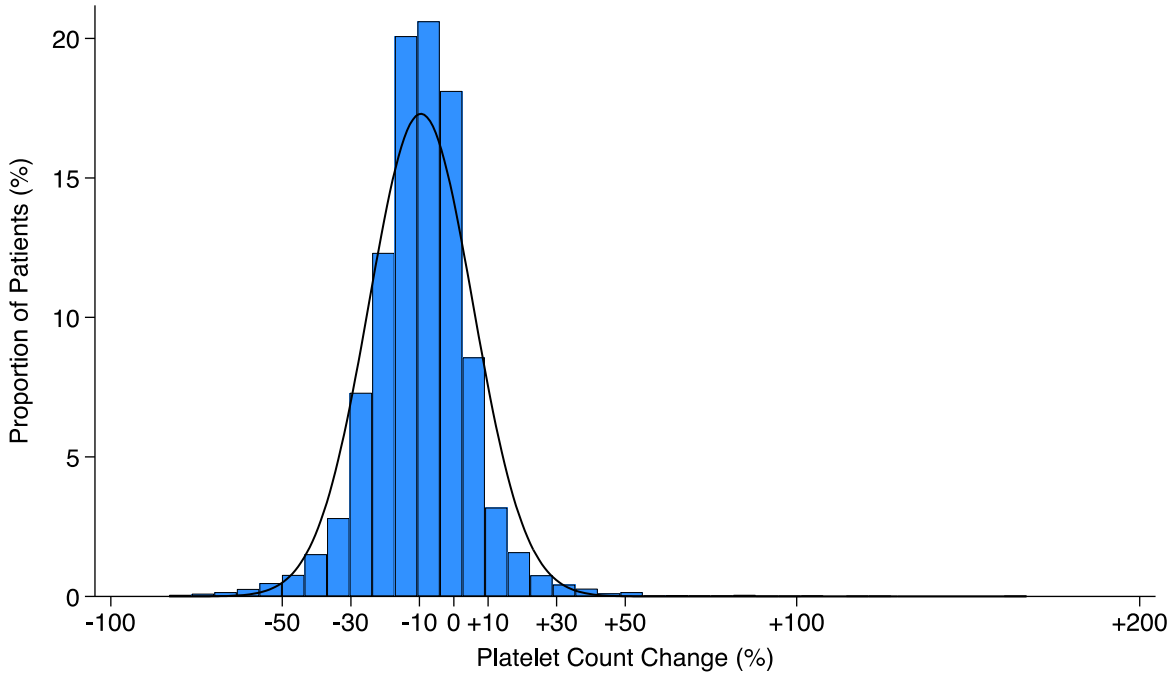
Supplementary figure 1. Sankey diagram for transition of thrombocytopenia (< 150 000/μL), normal platelet count (150 000-40 000/μL), and thrombocytosis (> 400 000/μL) rates from baseline to nadir.



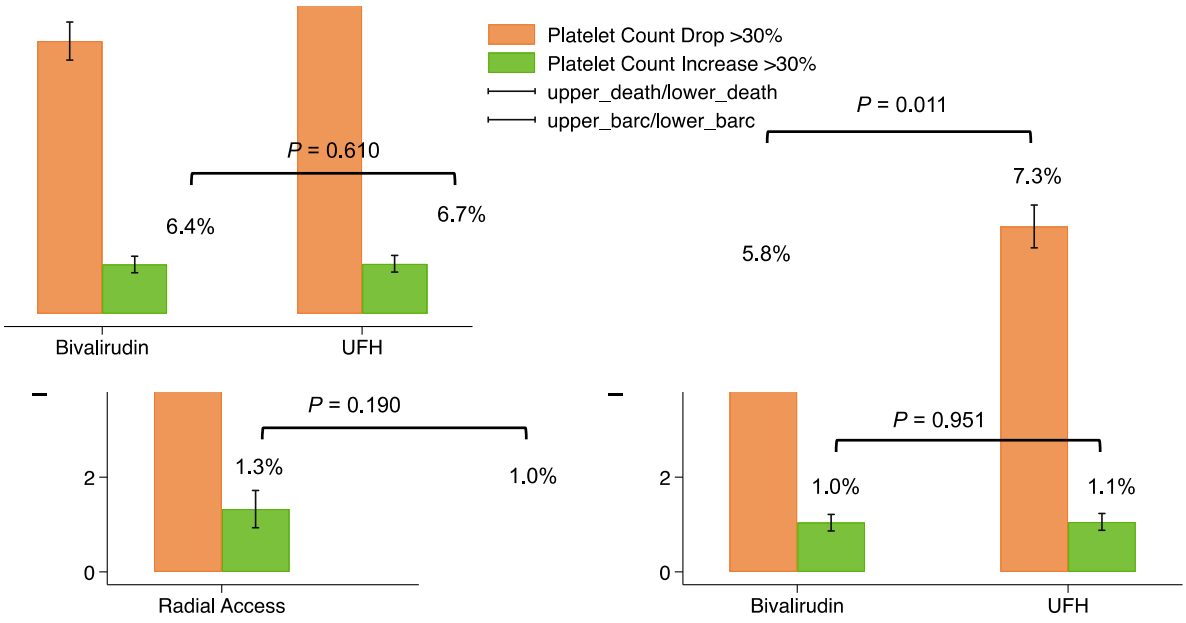
Supplementary figure 2. Sankey diagram for transition of thrombocytopenia (< 150 000/μL), normal platelet count (150 000-40 000/μL), and thrombocytosis (> 400 000/μL) rates from baseline to nadir.



Supplementary figure 3. Histogram of the distribution of relative changes in platelet count.

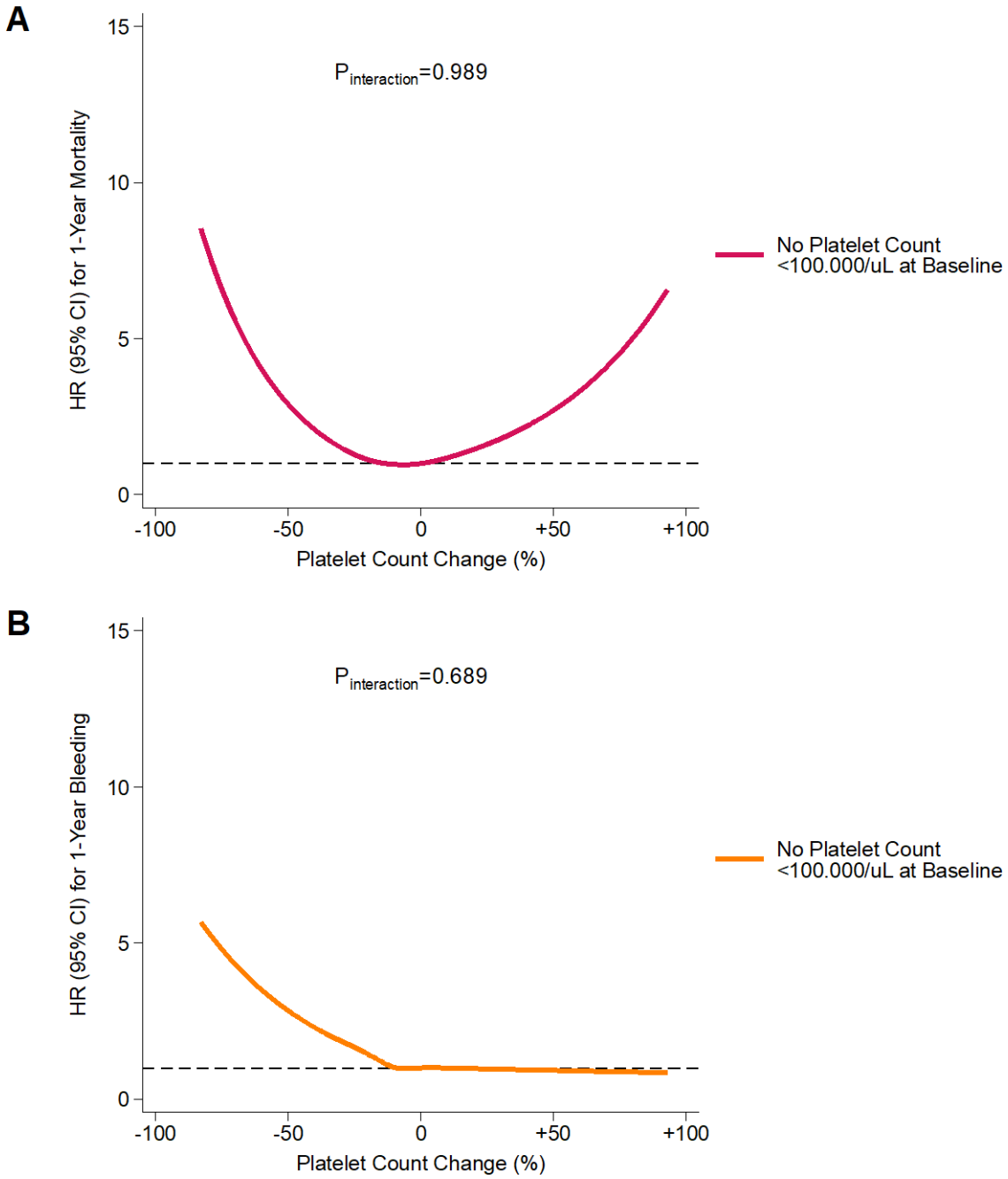


Supplementary figure 4. Rates of platelet count changes > 30% across randomized treatments.



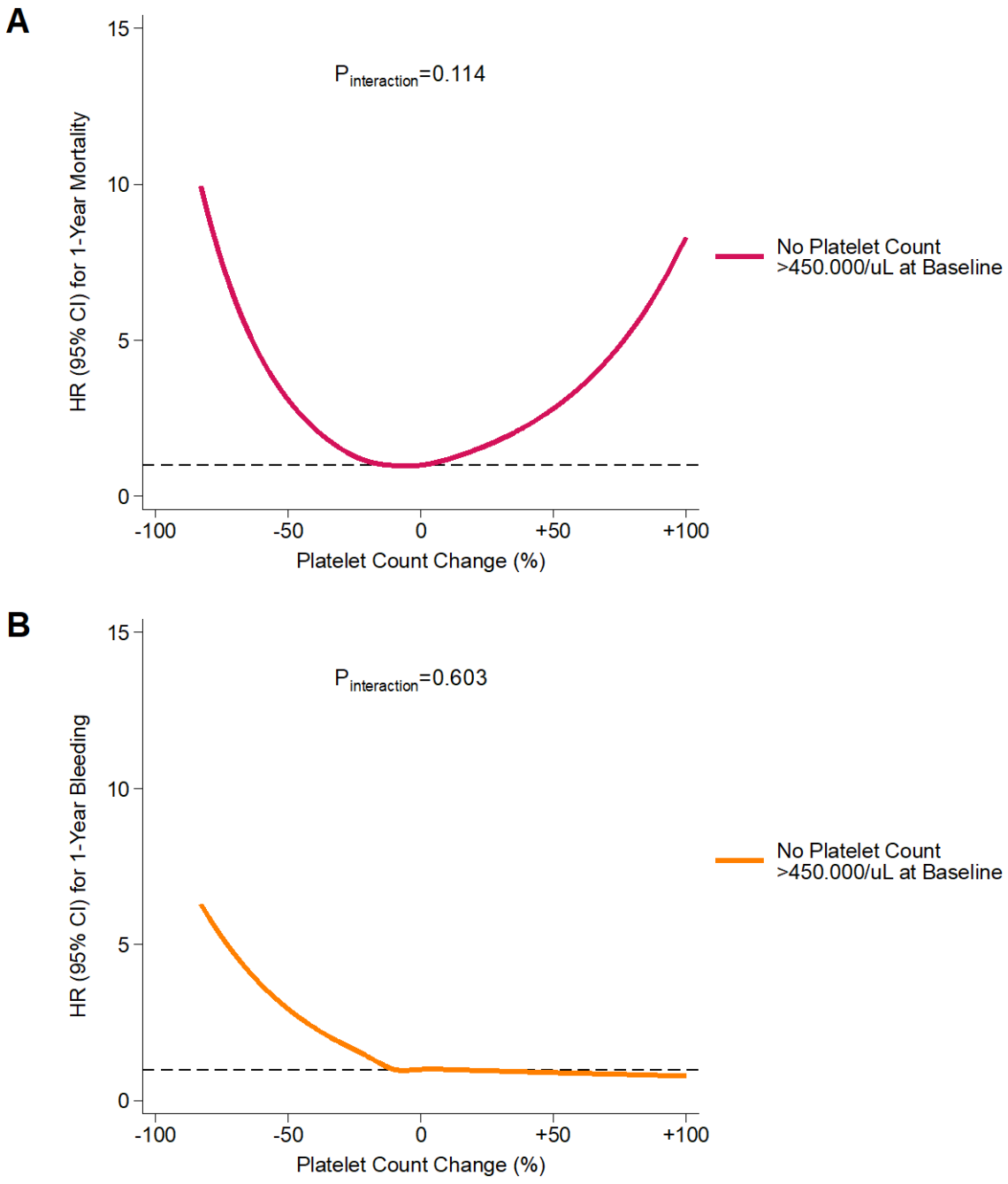
Supplementary figure 5. Spline functions of relative changes in platelet count on a continuous scale and 1-year mortality and bleeding stratified according to platelet count <100 000/µL at baseline.

*Only 43 patients had a platelet count < 100 000/µL at baseline. (A) Mortality. (B) Bleeding.



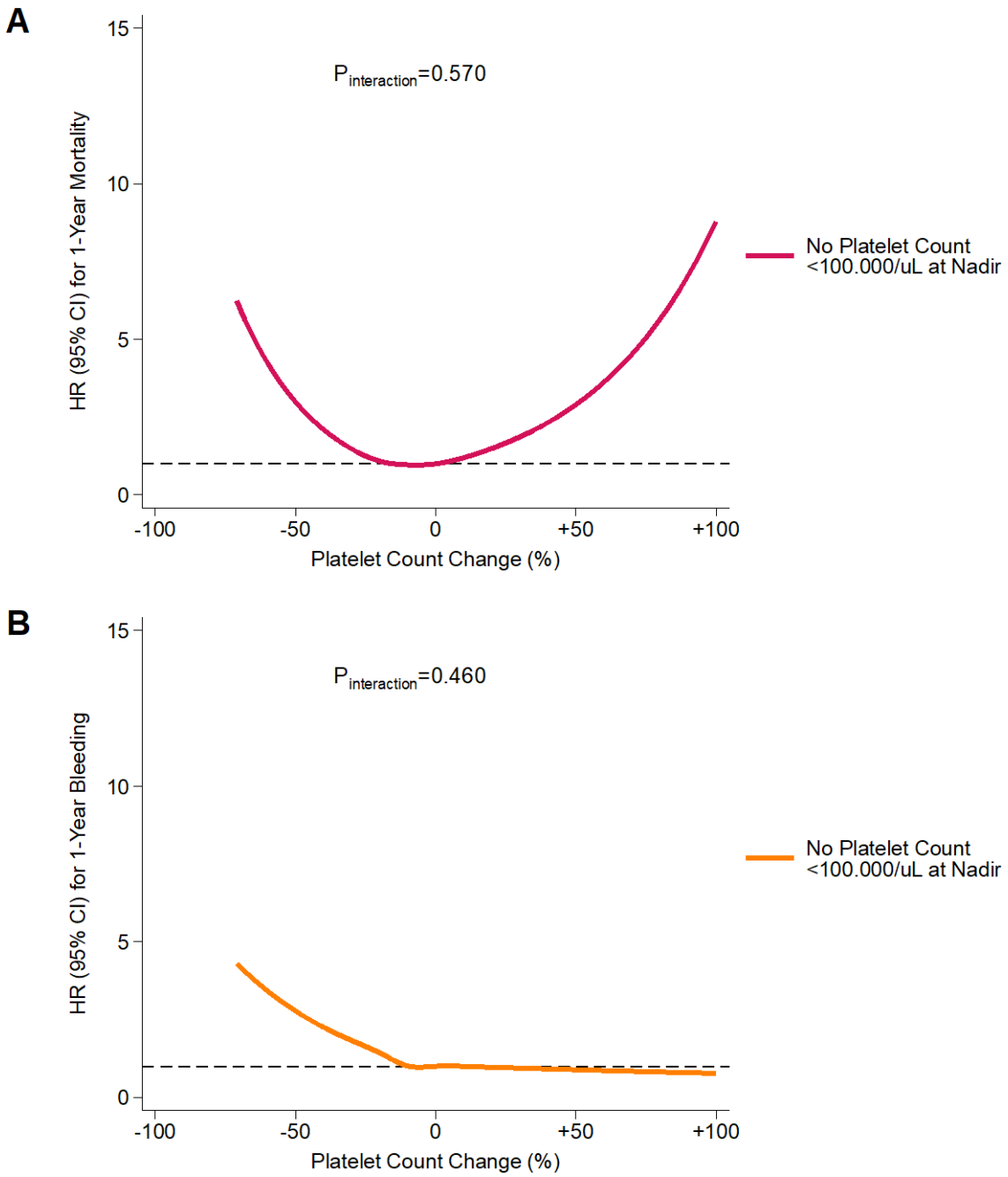
Supplementary figure 6. Spline functions of relative changes in platelet count on a continuous scale and 1-year mortality and bleeding stratified according to platelet count > 450 000/μL at baseline.

*Only 56 patients had a platelet count > 450 000/μL at baseline. (A) Mortality. (B) Bleeding.


A
15
10
5
0
$P_{interaction}$=0.114
HR (95% CI) for 1-Year Mortality
No Platelet Count
>450.000/uL at Baseline
-100
-50
0
+50
+100
Platelet Count Change (%)
B
15
10
5
0
$P_{interaction}$=0.603
HR (95% CI) for 1-Year Bleeding
No Platelet Count
>450.000/uL at Baseline
-100
-50
0
+50
+100
Platelet Count Change (%)

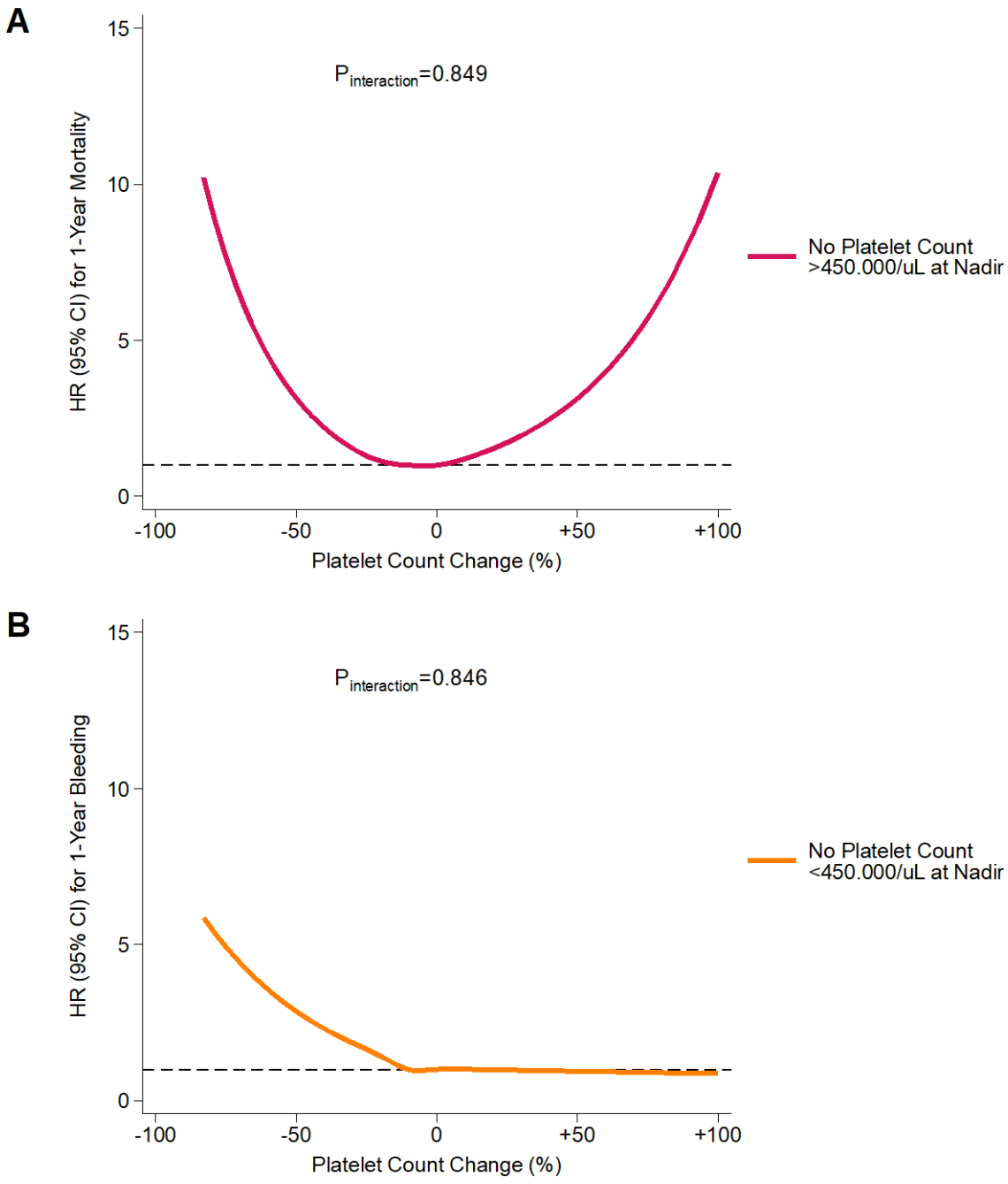
Supplementary figure 7. Spline functions of relative changes in platelet count on a continuous scale and 1-year mortality and bleeding stratified according to platelet count < 100 000/µL at nadir.

*Only 108 patients had a platelet count < 100 000/µL at nadir. (A) Mortality. (B) Bleeding.



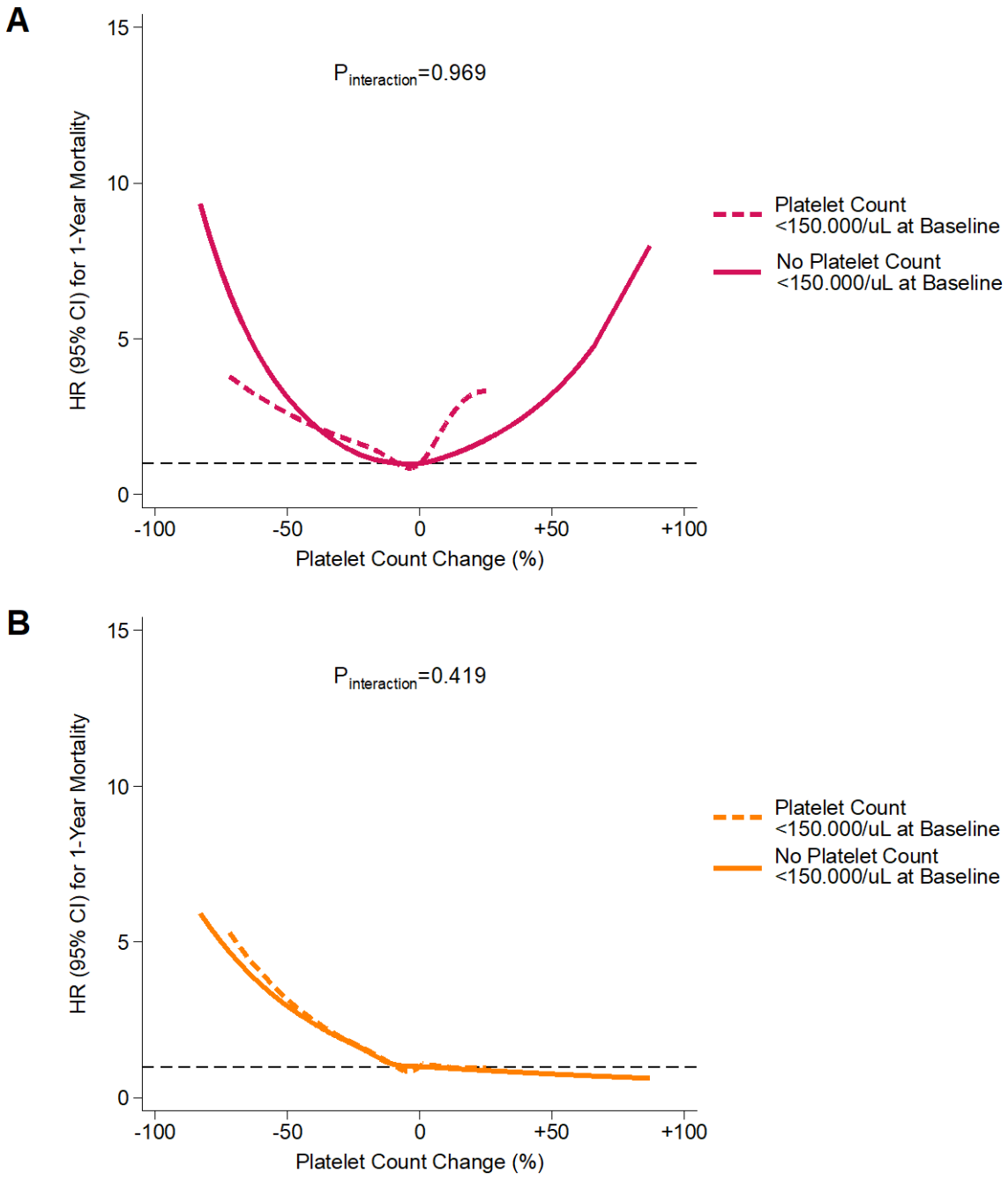
Supplementary figure 8. Spline functions of relative changes in platelet count on a continuous scale and 1-year mortality and bleeding stratified according to platelet count >450 000/μL at nadir.

*Only 32 patients had a platelet count >450 000/μL at nadir. (A) Mortality. (B) Bleeding.


A
15
10
5
0
$P_{interaction}$=0.849
HR (95% CI) for 1-Year Mortality
-100
-50
0
+50
+100
Platelet Count Change (%)
No Platelet Count
>450.000/uL at Nadir
B
15
10
5
0
$P_{interaction}$=0.846
HR (95% CI) for 1-Year Bleeding
-100
-50
0
+50
+100
Platelet Count Change (%)
No Platelet Count
<450.000/uL at Nadir

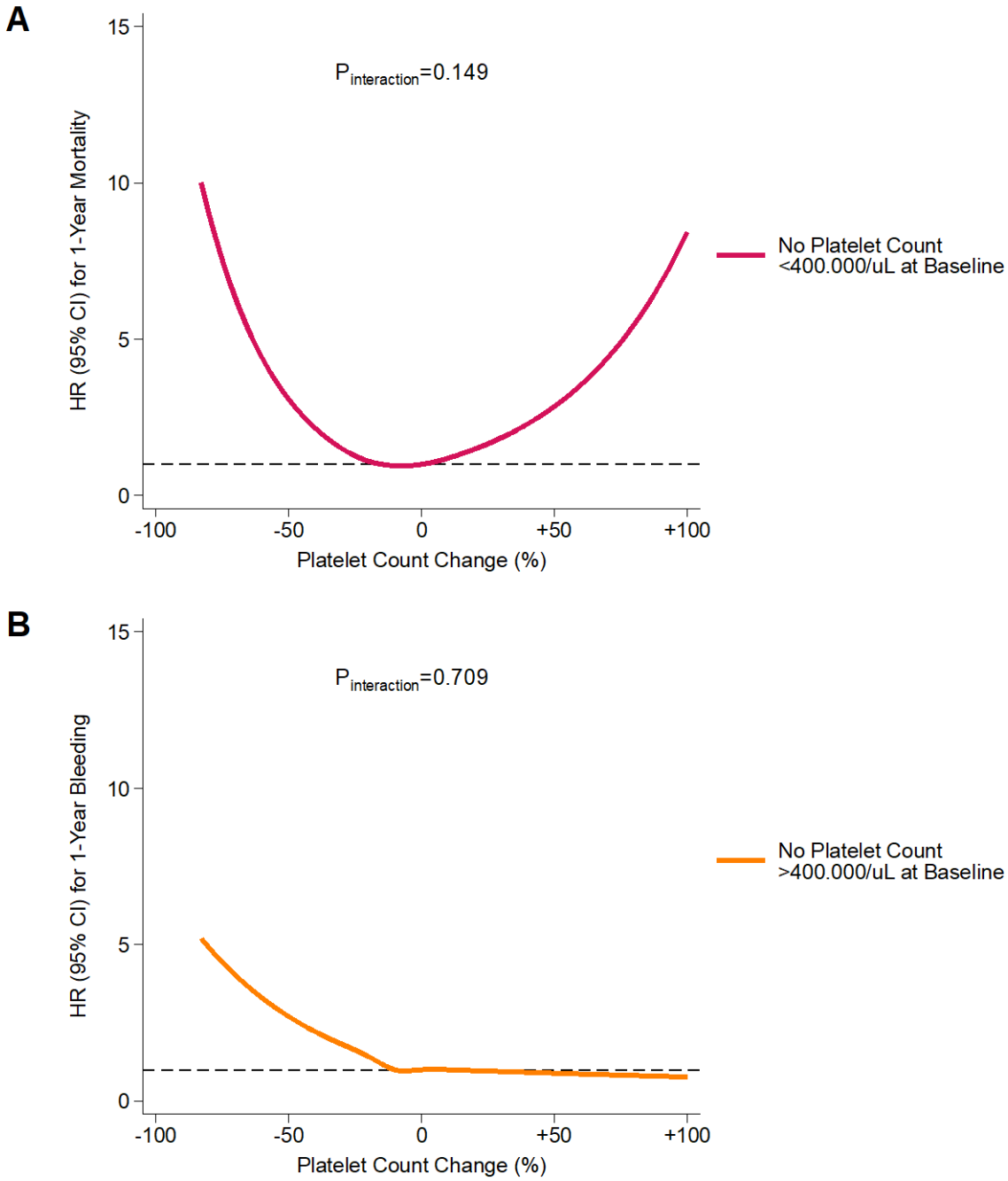
Supplementary figure 9. Spline functions of relative changes in platelet count on a continuous scale and 1-year mortality and bleeding stratified according to platelet count < 150 000/µL at baseline.

(A) Mortality. (B) Bleeding.



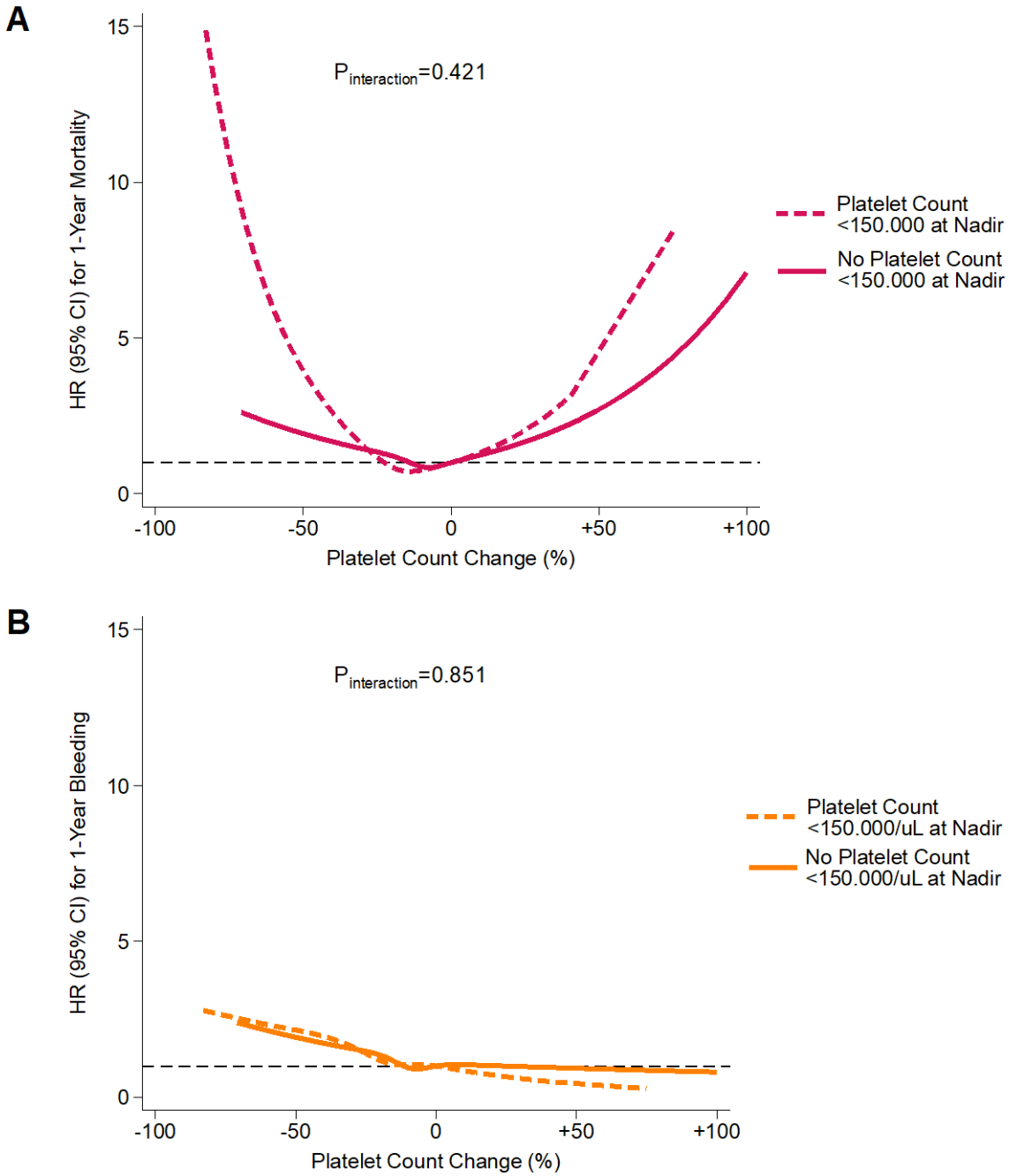
Supplementary figure 10. Spline functions of relative changes in platelet count on a continuous scale and 1-year mortality and bleeding stratified according to platelet count > 400 000/µL at baseline.

*Only 134 patients had a platelet count > 400 000/µL at baseline. (A) Mortality. (B) Bleeding.



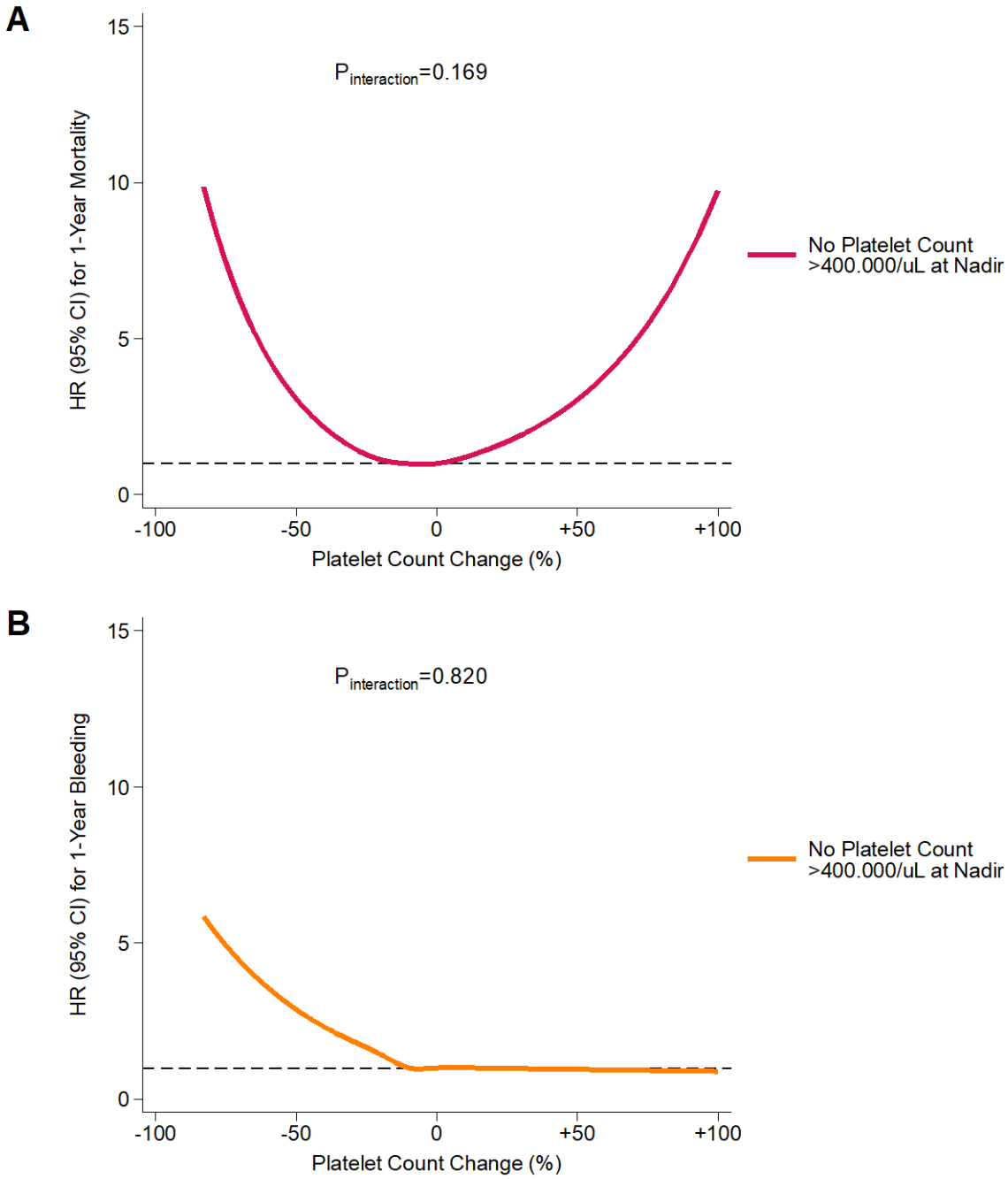
Supplementary figure 11. Spline functions of relative changes in platelet count on a continuous scale and 1-year mortality and bleeding stratified according to platelet count <150 000/µL at nadir.

(A) Mortality. (B) Bleeding.



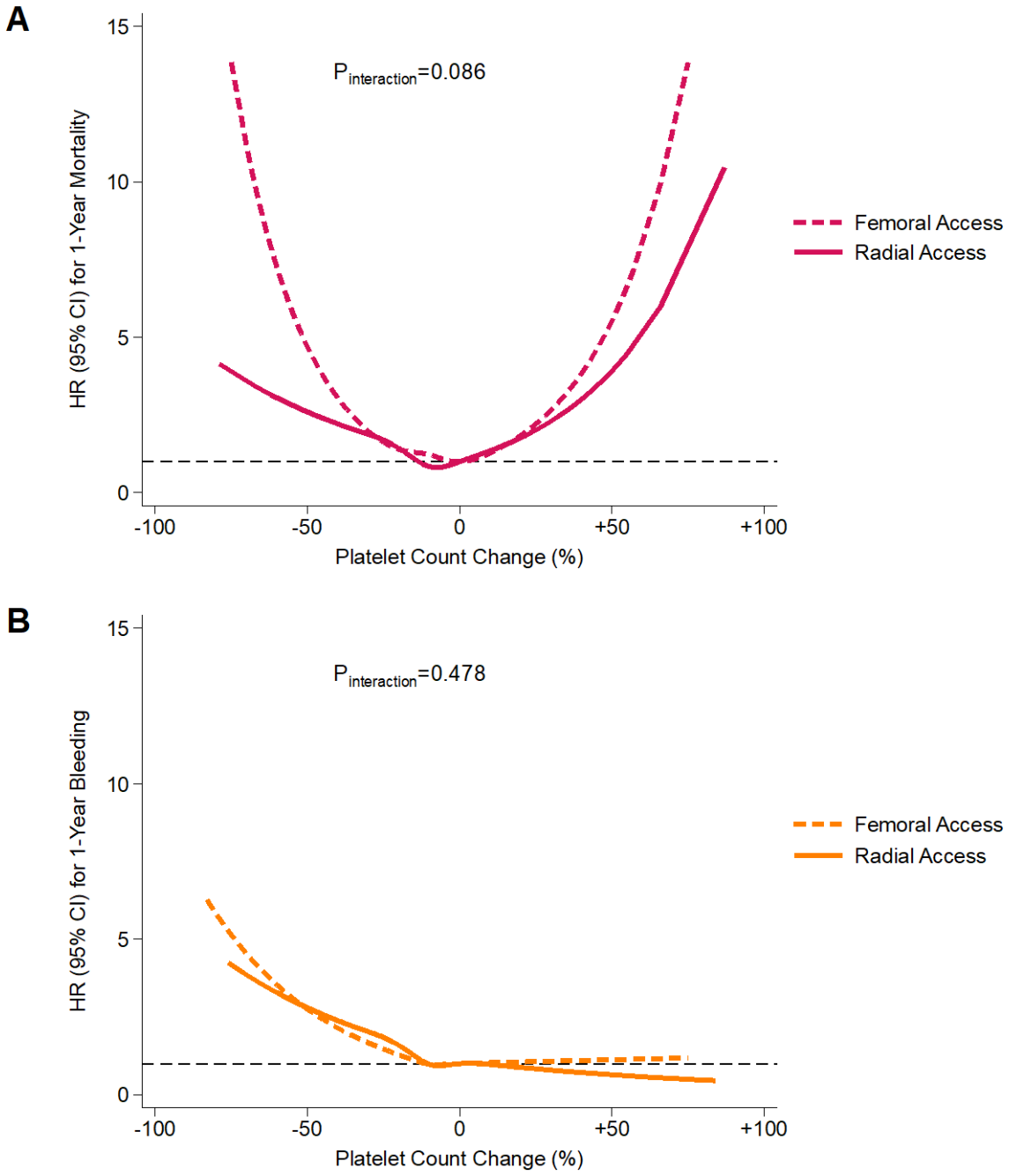
Supplementary figure 12. Spline functions of relative changes in platelet count on a continuous scale and 1-year mortality and bleeding stratified according to platelet count > 400 000/µL at nadir.

*Only 60 patients had a platelet count > 400 000/µL at nadir. (A) Mortality. (B) Bleeding.



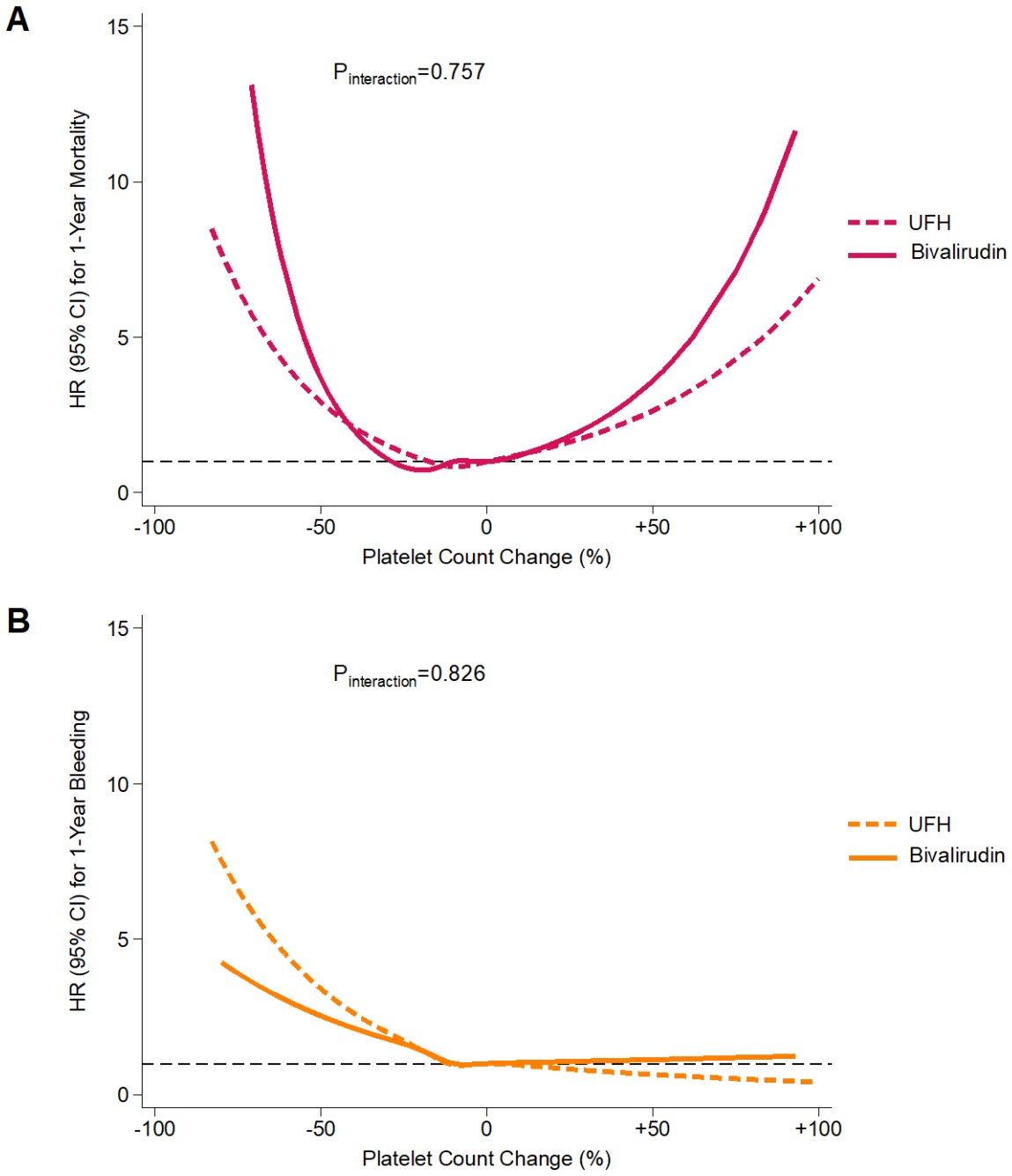
Supplementary figure 13. Spline functions of relative changes in platelet count on a continuous scale and 1-year mortality and bleeding stratified according to randomization to radial access vs femoral access.

(A) Mortality. (B) Bleeding.



Supplementary Figure 14. Spline functions of relative changes in platelet count on a continuous scale and 1-year mortality and bleeding stratified according to randomization to bivalirudin vs UFH.

(A) Mortality. (B) Bleeding.



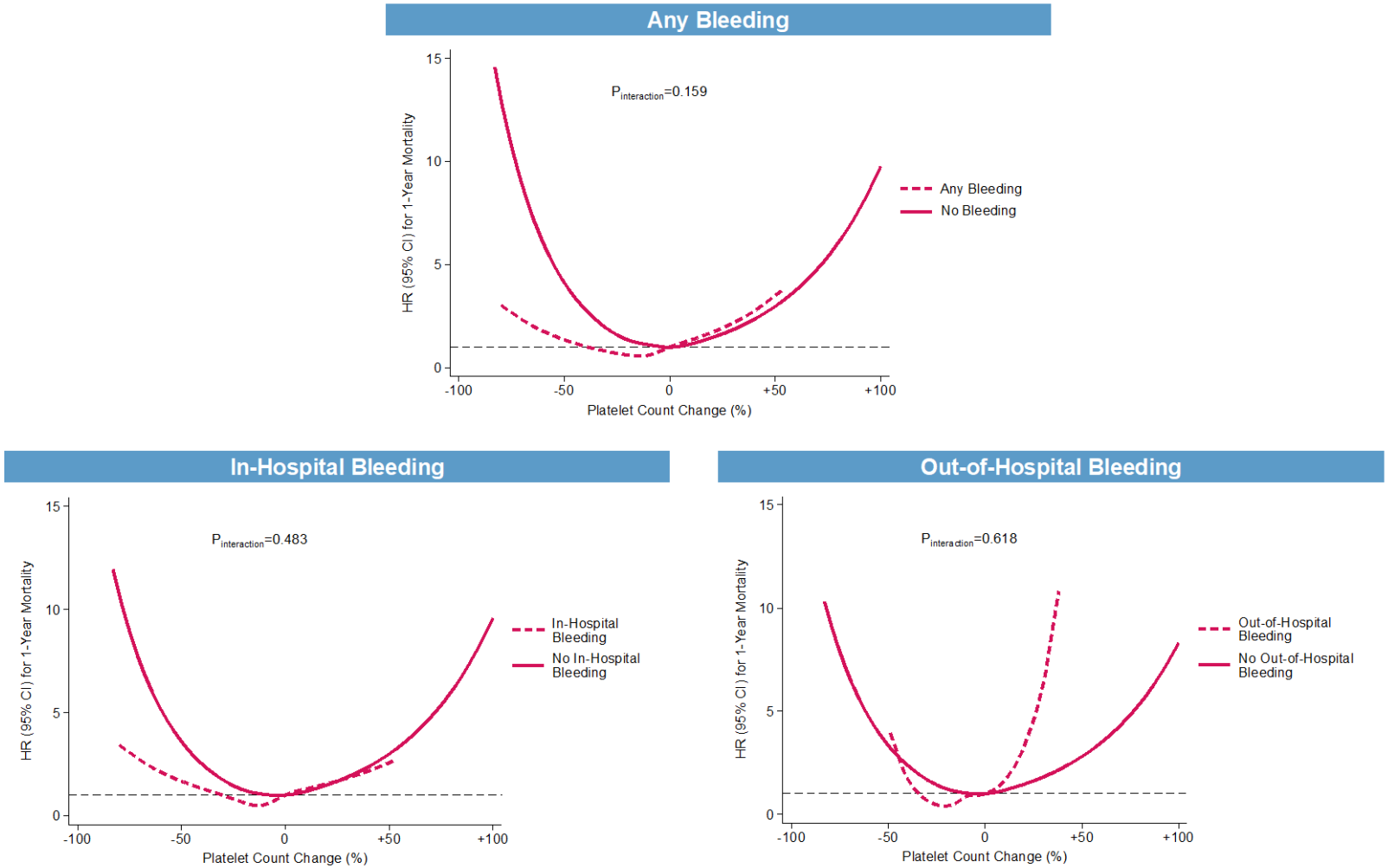
Supplementary Figure 15. Spline functions of relative changes in platelet count on a continuous scale and 1-year mortality and bleeding stratified according to age ≥ 75 years.

Supplementary Figure 16. Spline functions of relative changes in platelet count on a continuous scale and 1-year mortality and bleeding stratified according to diabetes mellitus.

Supplementary Figure 17. Spline functions of relative changes in platelet count on a continuous scale and 1-year mortality and bleeding stratified according to renal failure.

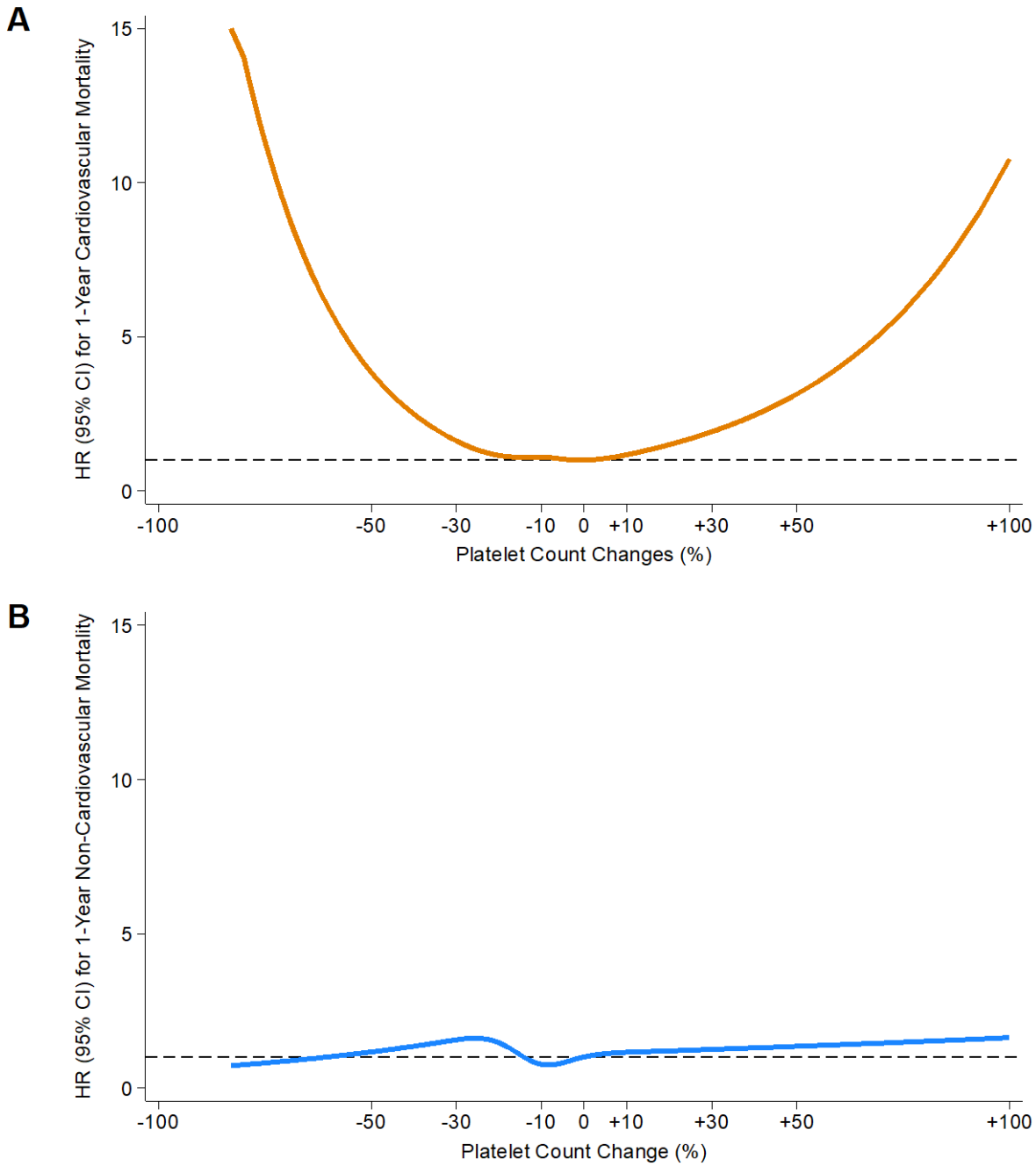
Supplementary Figure 18. Spline functions of relative changes in platelet count on a continuous scale and 1-year mortality and bleeding stratified according to STEMI.

Supplementary Figure 19. Spline functions of relative changes in platelet count on a continuous scale and 1-year mortality stratified according to any/in-hospital/out-of-hospital bleeding.



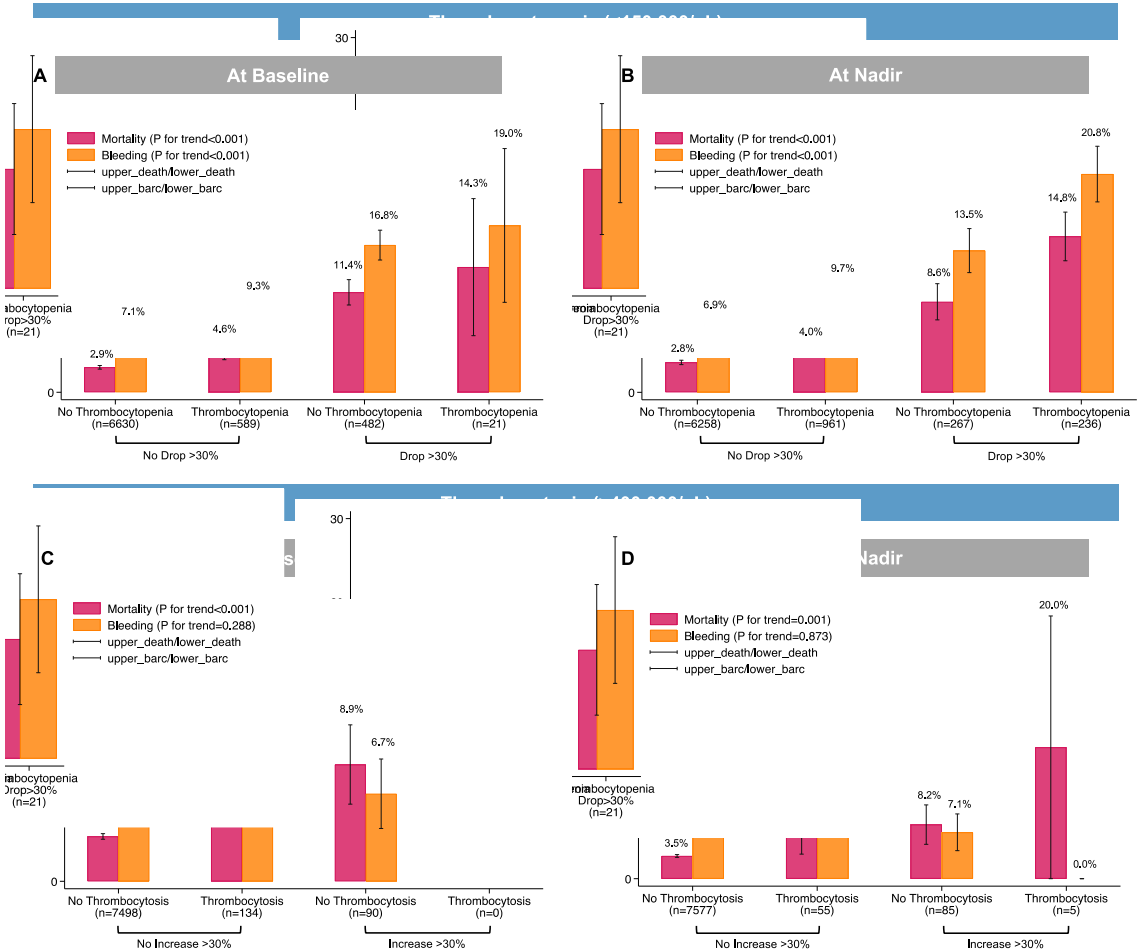
Supplementary Figure 20. Spline functions of relative changes in platelet count on a continuous scale and 1-year cardiovascular and noncardiovascular mortality.

(A) Cardiovascular mortality. (B) Noncardiovascular mortality.



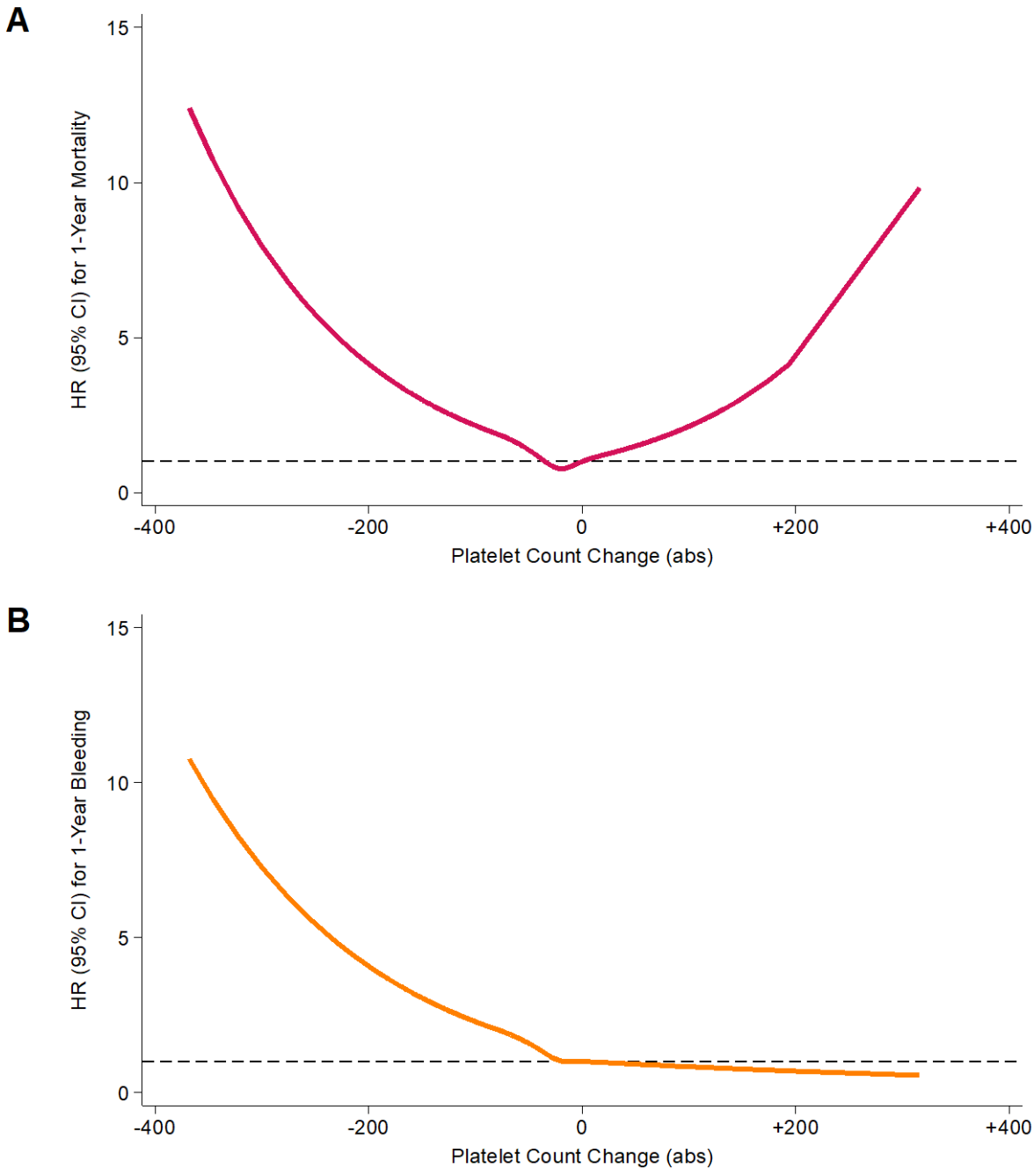
Supplementary Figure 21. Event rates of patients stratified according to platelet count drop/increase >30% and low (<100.000/µL)/high (> 450 000/µL) platelet count at baseline or nadir.

(A) Thrombocytopenia at baseline. (B) Thrombocytopenia at nadir. (C) Thrombocytosis at baseline. (D) Thrombocytosis at nadir.



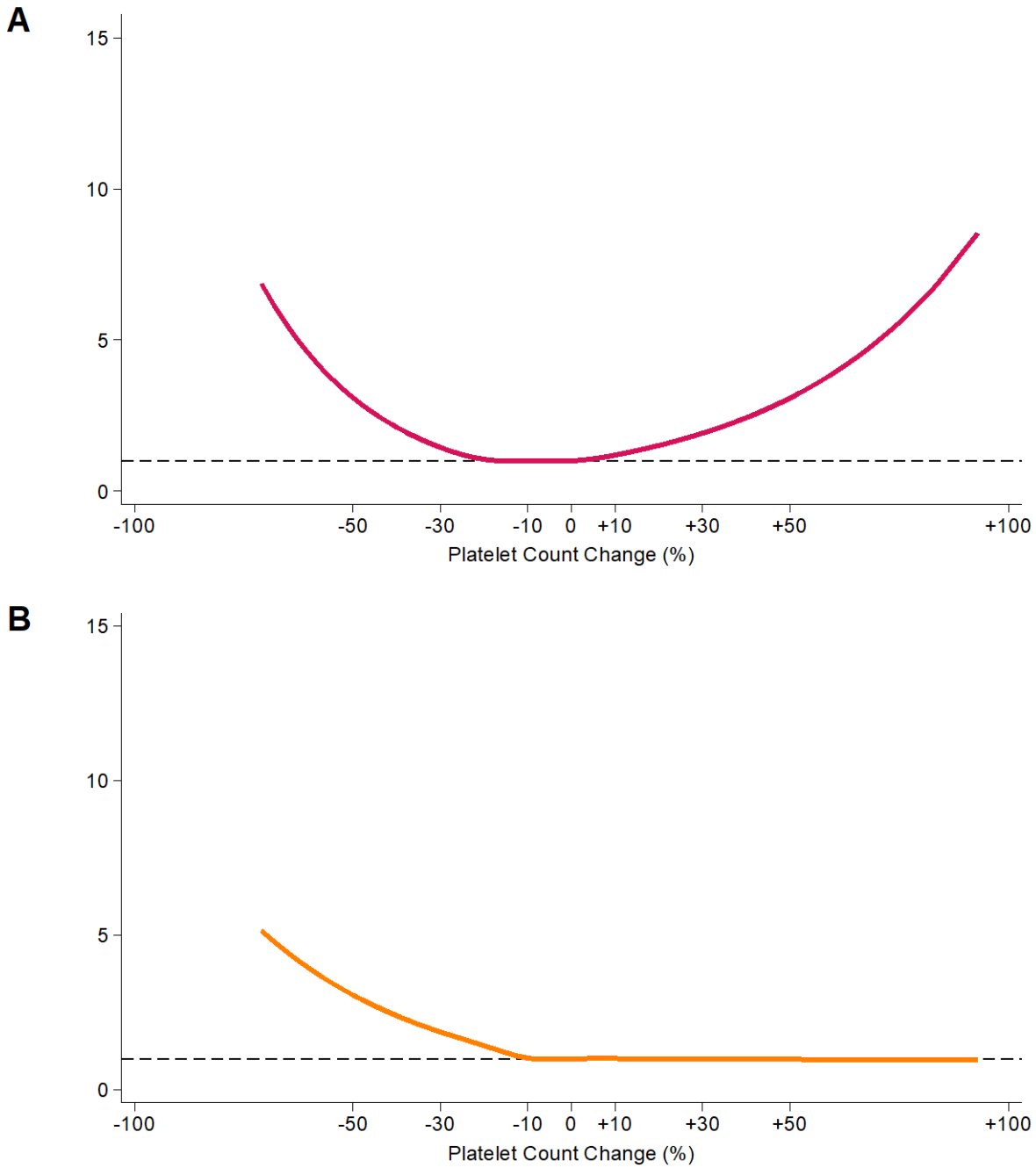
Supplementary Figure 22. Spline functions of absolute change in platelet count on a continuous scale and 1-year mortality and bleeding.

(A) Mortality. (B) Bleeding.



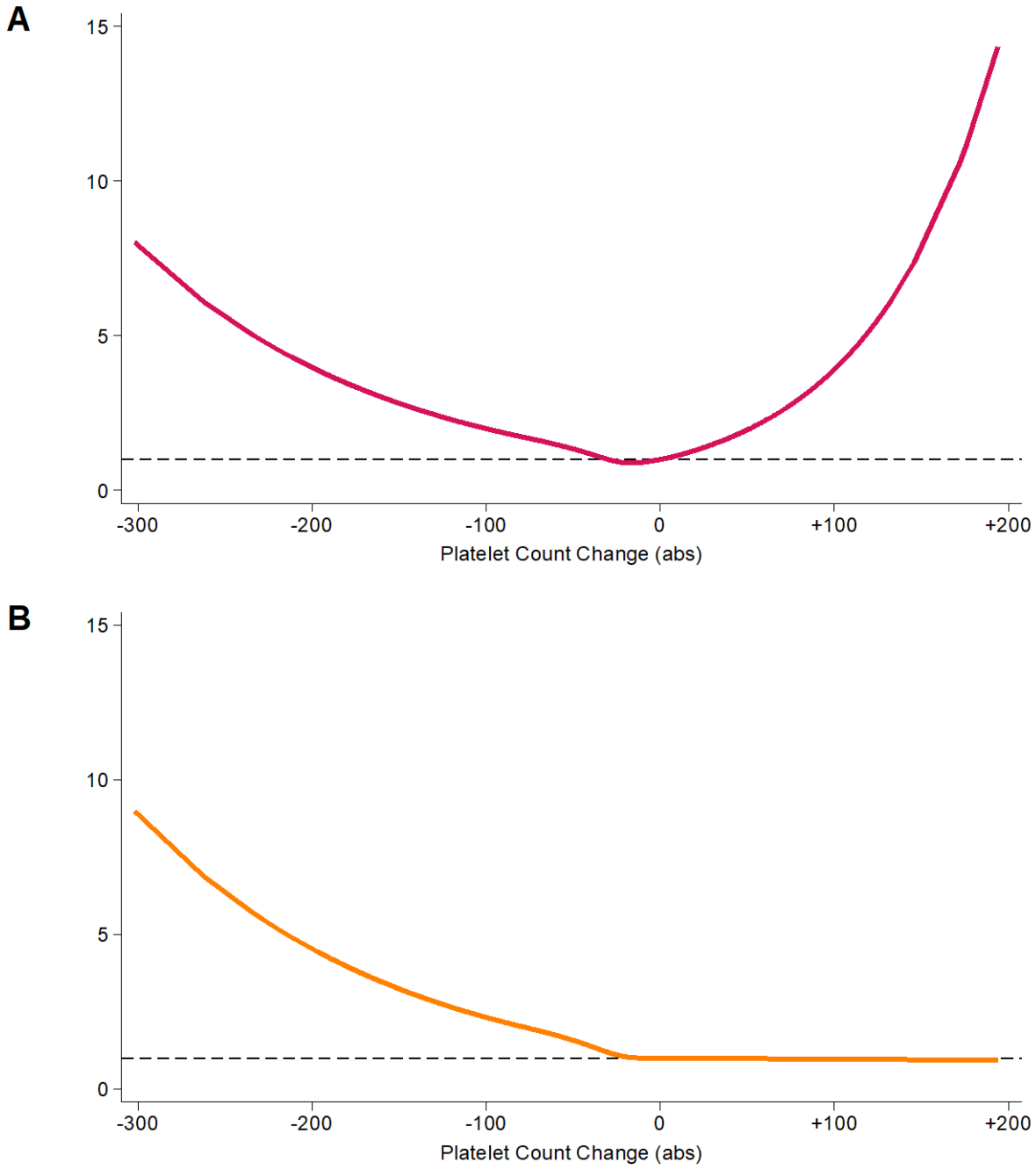
Supplementary Figure 23. Spline functions of relative changes in platelet count and 1-year mortality and bleeding after excluding patients with low (< 100 000/µL) or high (> 450 000/µL) platelet counts at baseline and/or nadir.

N = 7539 patients. (A) Mortality. (B) Bleeding.



Supplementary Figure 24. Spline functions of absolute changes in platelet count and 1-year mortality and bleeding after excluding patients with low (<100 000/µL) or high (> 450 000/µL) platelet counts at baseline and/or nadir.

N = 7539 patients. (A) Mortality. (B) Bleeding.



Supplementary Figure 25. Spline functions of relative changes in platelet count and 1-year mortality and bleeding after excluding patients receiving glycoprotein IIb/IIIa inhibitors. N = 6686 patients. (A) Mortality. (B) Bleeding.

Supplementary Figure 26. Spline functions of absolute changes in platelet count and 1-year mortality and bleeding after excluding patients receiving glycoprotein IIb/IIIa inhibitors. N = 6686 patients. (A) Mortality. (B) Bleeding.