

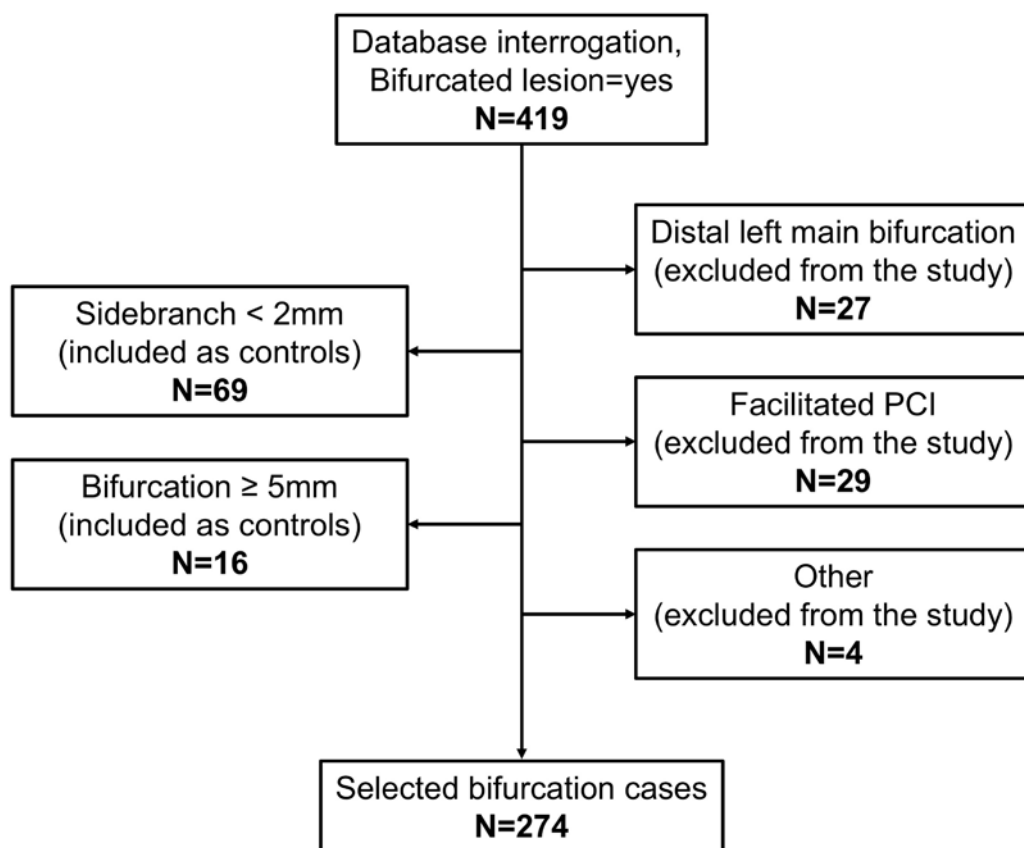


## Supplementary material

### Bifurcation Culprit Lesions in ST-segment Elevation Myocardial Infarction: Procedural Success and 5-year Outcome Compared With Nonbifurcation Lesions

#### Selection of (Bifurcation) Cases and Controls

**Figure 1 of the supplementary material.** Flow diagram showing the selection of bifurcation cases from initial database interrogation.



PCI, percutaneous coronary intervention.

**Table 1 of the supplementary material**

Quality Control of the Adjudication of Nonbifurcation Cases (Controls) in our Database

Controls reviewed	True controls	False controls	Prevalence of 'false controls'	95%CI
153	152 (99.35%)	1 (0.65%)	0.0065 (SE 0.01)	-0.0061 to -0.0190

It was estimated that a sample of 103 out of the 2472 controls would be enough to estimate a prevalence of incorrect adjudication of controls, with 95%CI and 90% power. Fifty more patients were reviewed up to a total of 153 control patients out of 2198 nonmatched controls. 95%CI, 95% confidence interval; SE, standard error.

Primary Percutaneous Coronary Intervention and Rescue Percutaneous Coronary Intervention

Table 2 of the supplementary material

Clinical and Anatomic Characteristics, Before and After Propensity Matching

Variable	Primary PCI (n = 456)			Rescue PCI (n = 92)		
	BIF group (n = 226)	MC group (n = 230)	<i>P</i>	BIF group (n = 48)	MC group (n = 44)	<i>P</i>
<b>Coronary anatomy</b>						
<i>Number of diseased vessels<sup>a</sup></i>						
0 <sup>b</sup>	7 (3)	6 (3)	.86	2 (4)	0 (0)	.39
1	129 (56)	122 (49)		25 (52)	28 (64)	
2	64 (28)	71 (31)		15 (31)	10 (23)	
3	30 (13)	27 (12)		6 (12)	3 (6)	
<i>Mean number of severely diseased vessels</i>	1.34 ± 0.7	1.24 ± 0.6	.28	1.36 ± 0.7	1.27 ± 0.7	.52
<i>Dominance</i>						
Left	14 (6)	16 (7)	.60	6 (13)	2 (5)	.38
Right	187 (83)	182 (79)		36 (75)	37 (84)	
Balanced	25 (11)	32 (14)		6 (13)	5 (11)	
<i>Culprit vessel<sup>a</sup></i>						
LAD	128 (57)	119 (52)	.15	31 (65)	28 (64)	.47
LCX	29 (13)	48 (21)		10 (21)	5 (11)	
RCA	45 (20)	41 (18)		5 (10)	8 (18)	

Other	24 (11)	22 (10)		2 (4)	3 (7)	
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BIF, bifurcation; BMI, body mass index; CAD, coronary artery disease; LAD, left anterior descending artery; LCx, left circumflex; MC, matched control; PCI, percutaneous coronary intervention; RCA, right coronary artery.

The data are expressed as mean  $\pm$  standard deviation or No. (%).

<sup>a</sup>Indicates the variables included in the propensity score.

<sup>b</sup>Secondary vessel disease only.

**Table 3 of the supplementary material**

Procedural Characteristics, Before and After Propensity-matched Analysis

Variable	Primary PCI (n=456)			Rescue PCI (n=92)		
	BIF group (n = 226)	MC group (n = 230)	P	BIF group (n = 48)	MC group (n = 44)	P
Symptoms to PCI <sup>a</sup> , min	263 ± 235	276 ± 226	.57	402 ± 236	429 ± 252	.59
Radial access	81 (36)	70 (30)	.22	5 (10)	13 (30)	.03
Contrast, mL	250 ± 89	233 ± 83	< .001	283 ± 75	212 ± 73	< .001
Procedural time, min	68 ± 29	63 ± 29	.04	77 ± 29	62 ± 31	.017
Fluoroscopy time, min	19 ± 13	14 ± 8	< .001	19 ± 9	14 ± 6	.003
Number of treated lesions <sup>b</sup>	1.20 ± 0.5	1.18 ± 0.5	.73	1.25 ± 0.5	1.18 ± 0.4	.51
Any aspiration thrombectomy <sup>b</sup>	108 (48)	118 (52)	.64	19 (40)	29 (60)	.21
Any balloon dilatation <sup>b</sup>	169 (75)	138 (60)	.001	30 (63)	23 (52)	.32
Number of different balloons <sup>b</sup>	1.63 ± 1.4	1.12 ± 1.1	< .001	0.81 ± 1.0	0.89 ± 0.9	.72
Any stent implantation <sup>b</sup>	204 (90)	203 (88)	.49	45 (94)	43 (98)	.62
Number of implanted stents <sup>b</sup>	1.23 ± 0.7	1.12 ± 0.7	.09	1.23 ± 0.6	1.27 ± 0.6	.73
Direct stenting <sup>c</sup>	76 (34)	107 (47)	.005	20 (42)	26 (59)	.09

BIF, bifurcation; MC, matched control; PCI, percutaneous coronary intervention.

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

<sup>a</sup>Indicates the variables included in the propensity score.

<sup>b</sup>Per patient.

<sup>c</sup>Per patient with at least 1 stent implanted.

**Table 4 of the supplementary material**

Events at 5 Years of Follow-up, and HR From Cox Regression Analysis (Crude and Adjusted to Rescue Percutaneous Coronary Intervention, Drug-eluting Stent, Aspiration Thrombectomy and Use of IIb/IIIa Inhibitors)

	BIF (n = 274)	MC (n = 274)	<i>P</i>	HR (95%CI)	<i>P</i> adj	HRadj (95%CI)
Death	33 (12)	35 (13)	.95	0.98 (0.61-1.59)	.71	1.10 (0.68-1.77)
Cardiac death	26 (10)	23 (8)	.59	1.17 (0.67-2.05)	.37	1.30 (0.74-2.28)
Combined event (death, CABG, AMI or TVR)	61 (22)	56 (21)	.43	1.16 (0.80-1.66)	.31	1.21 (0.84-1.74)
Recurrent MI	14 (5)	11 (4)	.49	1.32 (0.60-2.91)	.51	1.30 (0.59-2.87)
CABG	8 (2.9)	3 (1.1)	.12	2.69 (0.72-10.16)	.10	3.03 (0.80-11.52)
TVR	23 (8)	14 (5)	.11	1.70 (0.87-3.30)	.10	1.74 (0.89-3.39)

95%CI, 95% confidence interval; AMI, acute myocardial infarction; BIF, bifurcation; CABG, coronary

artery bypass graft; HR, hazard ratio; MC, matched control; MI, myocardial infarction; TVR, target vessel

revascularization.

**Figure 2 of the supplementary material**

Survival free from all cause death (A) and the composite event of death, recurrent MI, CABG or TVR (B), stratified by rescue or primary PCI.

