

## **SUPPLEMENTARY DATA**

### **Supplementary methods**

#### **Procedures**

All coronary revascularization procedures and related medical therapies were performed according to standard procedural guidelines.<sup>1,2</sup> A loading dose of aspirin (300 mg) and a P2Y<sub>12</sub> inhibitor (clopidogrel 300-600 mg, ticagrelor 180 mg, or prasugrel 60 mg) was administered before percutaneous coronary intervention (PCI) unless the patients had been regularly taking the medications. Anticoagulation during PCI was performed using unfractionated heparin to achieve an activated clotting time of 250-300 seconds. Invasive coronary angiography was performed using a transradial or transfemoral approach according to standard techniques. Diagnostic angiograms were obtained after intracoronary nitrate (100 or 200 µg) administration. All PCI procedures were performed using current standard techniques with second-generation drug-eluting stents or drug-eluting balloons. The choice of a stent vs balloon, stenting technique, use of additional imaging devices such as intravascular ultrasound or optical coherence tomography, or poststent adjunctive balloon inflation was left to the operator's discretion.

With respect to CABG procedures, an off-pump CABG method using bilateral internal thoracic artery grafting is the preferred technique at our institution.<sup>3</sup> All operations were performed using a standard median sternotomy approach. Bilateral internal thoracic arteries were prepared using skeletonization techniques with sharp dissection, clipping, and branch ligation. The saphenous vein was harvested from the patient's upper or lower leg with split incisions. Heparinized saline was used to dilate the saphenous vein graft (SVG). The right gastroepiploic artery (GEA) was prepared in situ in a pedicled manner. The right internal thoracic artery (RITA) was anastomosed to the left side of the left internal thoracic artery (LITA) with a continuous running suture to construct a Y composite graft. The LITA was anastomosed to the left anterior descending artery (LAD) and its branches, and then the RITA was anastomosed to the left circumflex artery (LCX). If proximal right coronary artery (RCA) stenosis was greater than 80%, the RITA was initially selected as a graft. If the length of the harvested RITA was not sufficient to reach the

RCA anastomosis, the right GEA was used. If proximal RCA stenosis was less than 80%, aortocoronary bypass was performed using the SVG. The selection of perioperative treatment strategy, including the use of cardiopulmonary bypass, number of grafts used, determination of anastomosis site, and concomitant medical therapy, was left to the operator's preference. A Transonic Flowmeter (Transonic Systems, Ithaca, NY, USA) was used to evaluate the quality of the anastomosis according to measured transit time flow.

**Table 1 of the supplementary data.** Comparison of baseline characteristics between the 2 PCI groups

Variables	PCI-CR (n = 188)	PCI-IR (n = 263)	P
<b>Demographic factors</b>			
<i>Age, y</i>	67.1±11.2	69.3±11.4	.041
Age > 65 y	124 (66.0)	185 (70.3)	.376
<i>Male sex</i>	155 (82.4)	195 (74.1)	.049
<i>Body mass index, kg/m<sup>2</sup></i>	23.9±3.0	23.5±3.4	.170
<i>Body mass index &gt; 25kg/m<sup>2</sup></i>	61 (32.4)	82 (31.2)	.855
<b>Clinical presentation and course</b>			
<i>Acute coronary syndrome</i>	93 (49.7)	132 (50.4)	.968
<i>Acute myocardial infarction</i>	31 (16.5)	60 (22.8)	.126
<i>Number of vessels involved</i>			< .001
2-vessels	117 (62.2)	100 (38.0)	
3-vessels	71 (37.8)	163 (62.0)	
<i>Left main disease</i>	34 (18.1)	46 (17.5)	.970
<i>Use of ECMO</i>	2 (1.1)	5 (2.1)	.727
<i>Left ventricular ejection fraction, %</i>	38.3±8.4	36.8±8.4	.058
<i>LVEF &lt; 35%</i>	53 (28.2)	92 (35.0)	.156
<b>Risk factors and medical history</b>			
<i>Hypertension</i>	120 (63.8)	194 (73.8)	.031
<i>Diabetes mellitus</i>	126 (67.0)	181 (68.8)	.763
<i>Dyslipidemia</i>	58 (30.9)	82 (31.2)	> .999
<i>Current smoker</i>	28 (14.9)	65 (24.7)	.015
<i>Chronic kidney disease</i>	49 (26.1)	65 (24.7)	.830
On dialysis	23 (12.2)	19 (7.2)	.101
<i>History of PCI</i>	50 (26.6)	59 (22.4)	.365
<i>History of CABG</i>	32 (17.0)	22 (8.4)	.008
<i>History of myocardial infarction</i>	53 (28.2)	86 (32.7)	.358
<i>History of stroke</i>	20 (10.6)	28 (10.6)	> .999
<i>Peripheral vascular disease</i>	8 (4.3)	22 (8.4)	.125
<i>Hemoglobin (mg/dL)</i>	12.7 ± 2.3	12.3 ± 2.3	.115
<i>Glomerular filtration rate, mL/min/1.73 m<sup>2</sup></i>	64.7 ± 32.8	59.0 ± 29.8	.057
<b>Medication at discharge</b>			
<i>Aspirin</i>	168 (89.4)	238 (90.5)	.813
<i>P2Y<sub>12</sub> inhibitor</i>	180 (95.7)	255 (97.0)	.668
<i>RAS blockade</i>	115 (61.2)	152 (57.8)	.534
<i>Statin</i>	171 (91.0)	240 (91.3)	> .999

CABG, coronary artery bypass graft; ECMO, extracorporeal membrane oxygenation; LVEF, left ventricular ejection fraction; PCI-CR, percutaneous coronary intervention with complete revascularization; PCI-IR, percutaneous coronary intervention with incomplete revascularization; RAS, renin-angiotensin system.

The data are expressed as are mean  $\pm$  standard deviation, median [1st interquartile, 3rd interquartile], or No. (%).

**Table 2 of the supplementary data.** Clinical outcomes with exclusion of patients with acute myocardial infarction

PCI vs CABG				
	PCI (n = 360)	CABG (n = 900)	Hazard ratio (95%CI)*	P
Cardiac death or MI	84 (25.7)	151 (21.3)	1.36 (0.98-1.88)	.067
Death	121 (34.4)	185 (25.4)	1.43 (1.08-1.89)	.013
Cardiac death	76 (23.2)	145 (20.5)	1.26 (0.90-1.77)	.178
MI	19 (6.5)	11 (1.6)	5.27 (2.22-12.52)	< .001
Stroke	25 (8.5)	53 (7.6)	1.14 (0.65-2.01)	.642
Heart failure readmission	41 (13.5)	33 (5.3)	2.97 (1.69-5.24)	< .001
Target vessel revascularization	26 (9.1)	15 (2.3)	4.04 (1.90-8.62)	< .001
PCI-CR vs CABG				
	PCI-CR (n = 157)	CABG (n = 900)	Hazard ratio (95%CI)*	P
Cardiac death or MI	26 (18.5)	151 (21.3)	0.89 (0.54-1.48)	.664
Death	43 (28.2)	185 (25.4)	1.09 (0.72-1.64)	.690
Cardiac death	23 (16.3)	145 (20.5)	0.83 (0.49-1.40)	.480
MI	4 (3.1)	11 (1.6)	2.36 (0.51-10.84)	.270
Stroke	15 (11.0)	53 (7.6)	1.69 (0.86-3.33)	.127
Heart failure readmission	20 (14.7)	33 (5.3)	3.70 (1.78-7.69)	< .001
Target vessel revascularization	9 (7.2)	15 (2.3)	3.62 (1.37-9.55)	.009
PCI-IR vs CABG				
	PCI-IR (n = 203)	CABG (n = 900)	Hazard ratio (95%CI)*	P
Cardiac death or MI	58 (31.1)	151 (21.3)	1.62 (1.13-2.32)	.009
Death	78 (39.1)	185 (25.4)	1.66 (1.21-2.27)	.002
Cardiac death	53 (28.4)	145 (20.5)	1.55 (1.07-2.25)	.021
MI	15 (9.2)	11 (1.6)	7.01 (2.81-17.51)	< .001
Stroke	10 (6.4)	53 (7.6)	0.78 (0.36-1.69)	.532
Heart failure readmission	21 (12.6)	33 (5.3)	2.60 (1.34-5.02)	.005
Target vessel revascularization	17 (10.7)	15 (2.3)	3.92 (1.65-9.33)	.002
PCI-CR vs PCI-IR				
	PCI-CR (n = 157)	PCI-IR (n = 203)	Hazard ratio (95%CI)*	P
Cardiac death or MI	26 (18.5)	58 (31.1)	0.59 (0.36-0.96)	.034
Death	43 (28.2)	78 (39.1)	0.75 (0.50-1.11)	.148
Cardiac death	23 (16.3)	53 (28.4)	0.57 (0.34-0.96)	.035
MI	4 (3.1)	15 (9.2)	0.29 (0.08-1.00)	.050
Stroke	15 (11.0)	10 (6.4)	2.41 (1.00-5.79)	.049
Heart failure readmission	20 (14.7)	21 (12.6)	1.03 (0.54-2.00)	.919

Target vessel revascularization	9 (7.2)	17 (10.7)	0.55 (0.24-1.29)	.169
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CABG, coronary artery bypass graft; CR, complete revascularization; IR, incomplete revascularization;

MI, myocardial infarction; PCI, percutaneous coronary intervention.

The data are presented as No. (%). Percentages are 5-year Kaplan-Meier estimates.

\*Multivariable adjusted analysis was performed with the variables of age > 65 years, male sex, acute coronary syndrome, body mass index > 25kg/m<sup>2</sup>, hypertension, diabetes mellitus, current smoking, LVEF > 35%, chronic kidney disease, history of stroke, history of PCI, atrial fibrillation, significant mitral regurgitation, aspirin, P2Y<sub>12</sub> inhibitor, renin-angiotensin system blockade, and statin.

**Table 3 of the supplementary data.** Competing risk analysis for clinical outcomes

PCI vs CABG				
	PCI	CABG	Hazard ratio (95%CI)*	P
Cardiac death or MI	115 (26.1)	184 (21.6)	1.26 (1.00-1.59)	.055
Cardiac death	178 (22.9)	101 (21.0)	1.13 (0.89-1.44)	.330
MI	12 (7.2)	32 (1.4)	5.48 (2.82-10.60)	< .001
Stroke	64 (8.1)	32 (7.8)	1.03 (0.68-1.57)	.880
Heart failure readmission	40 (14.4)	58 (5.4)	3.06 (2.04-4.59)	< .001
Target vessel revascularization	16 (9.3)	37 (2.2)	4.27 (2.40-7.58)	< .001
PCI-CR vs CABG				
	PCI-CR	CABG	Hazard ratio (95%CI)*	P
Cardiac death or MI	35 (19.2)	184 (21.6)	0.89 (0.62-1.27)	.510
Cardiac death	29 (15.9)	101 (21.0)	0.75 (0.51-1.11)	.147
MI	10 (5.5)	32 (1.4)	4.05 (1.76-9.35)	.001
Stroke	16 (9.5)	32 (7.8)	1.20 (0.70-2.07)	.506
Heart failure readmission	24 (13.9)	58 (5.4)	2.93 (1.75-4.91)	< .001
Target vessel revascularization	15 (9.1)	37 (2.2)	4.10 (2.05-8.19)	< .001
PCI-IR vs CABG				
	PCI-IR	CABG	Hazard ratio (95%CI)*	P
Cardiac death or MI	80 (30.8)	184 (21.6)	1.54 (1.18-2.00)	.001
Cardiac death	72 (27.8)	101 (21.0)	1.42 (1.08-1.87)	.012
MI	22 (8.5)	32 (1.4)	6.51 (3.22-13.20)	< .001
Stroke	16 (7.1)	32 (7.8)	0.91 (0.53-1.57)	.731
Heart failure readmission	34 (14.8)	58 (5.4)	3.13 (1.98-4.97)	< .001
Target vessel revascularization	22 (9.4)	37 (2.2)	4.39 (2.31-8.33)	< .001
PCI-CR vs PCI-IR				
	PCI-CR	PCI-IR	Hazard ratio (95%CI)*	P
Cardiac death or MI	35 (19.2)	80 (30.8)	0.58 (0.39-0.86)	.007
Cardiac death	29 (15.9)	72 (27.8)	0.53 (0.34-0.81)	.004
MI	10 (5.5)	22 (8.5)	0.63 (0.30-1.33)	.232
Stroke	16 (9.5)	16 (7.1)	1.32 (0.66-2.64)	.433
Heart failure readmission	24 (13.9)	34 (14.8)	0.94 (0.56-1.58)	.820
Target vessel revascularization	15 (9.1)	22 (9.4)	0.94 (0.48-1.81)	.844

CABG, coronary artery bypass graft; CR, complete revascularization; IR, incomplete revascularization;

MI, myocardial infarction; PCI, percutaneous coronary intervention

The data are presented as No. (%). Percentages are 5-year Kaplan-Meier estimates.

\*Multivariable adjusted analysis was performed with the variables of age > 65 years, male sex, acute coronary syndrome, body mass index > 25 kg/m<sup>2</sup>, hypertension, diabetes mellitus, current smoking, left ventricular ejection fraction > 35%, chronic kidney disease, history of stroke, history of PCI, atrial

fibrillation, significant mitral regurgitation, aspirin, P2Y<sub>12</sub> inhibitor, renin-angiotensin system blockade, and statin.



## REFERENCES OF THE SUPPLEMENTARY DATA

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3. Choi KH, Song YB, Jeong DS, et al. Differential effects of dual antiplatelet therapy in patients presented with acute coronary syndrome vs stable ischaemic heart disease after coronary artery bypass grafting. *Eur Heart J Cardiovasc Pharmacother*. 2021;7:517-526.