Supplementary table S1. Crude reperfusion and clinical outcomes in direct stenting versus conventional stenting

	DS	CS	Odds ratio (95%CI)	p-value
Stent dimensions in culprit lesion				
Cumulative stent length – mm	23 [18 – 33] / 163	32 [23 – 48] / 239	-	<0.001
Diameter – mm	3.22 ± 0.48 / 163	3.15 ± 0.48 / 239	-	0.17
One DES – no. (%)	121 (73.8) / 164	131 (54.6) / 240	2.34 [1.52 – 3.60]	<0.001
Early reperfusion parameters post-PCI				
TIMI 3 flow in the IRA – no. (%)	165/178 (92.7)	216/239 (90.4)	1.35 [0.67 – 2.75]	0.41
TIMI blush grade 3 – no. (%)	76/117 (65.0)	78/140 (55.7)	1.47 [0.89 – 2.44]	0.13
cTFC in the IRA – frames/second	17 [11 – 25] / 164	19 [13 – 29] / 215	-	0.02
cTFC ≤ 23 frames/sec – no. (%)	111/160 (69.4)	134/215 (62.3)	1.37 [0.89 – 2.12]	0.16
Complete ST-segment resolution – no. (%)	120/167 (71.9)	119/205 (58.0)	1.85 [1.19 – 2.86]	<0.01
Clinical outcomes (1 year) – no. (%)				
All-cause mortality	0/184 (0.0)	8/248 (3.2)	-	0.02*
Cardiac death	0/184 (0.0)	3/248 (1.2)	-	0.27*
Myocardial re-infarction	9/184 (4.9)	8/248 (3.2)	1.54 [0.58 – 4.08]	0.38
Target lesion failure	4/184 (2.2)	3/248 (1.2)	1.81 [0.40 – 8.21]	0.47*
Stent thrombosis	1/184 (0.5)	2/248 (0.8)	0.67 [0.06 – 7.50]	1.00*
Stroke	0/184 (0.0)	3/248 (1.2)	-	0.27*
Urgent revascularization	8/184 (4.3)	5/248 (2.0)	2.21 [0.71 – 6.87]	0.17
Target lesion revascularization	2/184 (1.1)	2/248 (0.8)	1.35 [0.19 – 9.69]	1.00*
Composite of death and stent thrombosis	1/184 (0.5)	10/248 (4.0)	0.13 [0.02 – 1.03]	0.054
Composite of death, myocardial re-infarction, stroke, stent thrombosis and urgent revascularization	11/184 (6.0)	18/248 (7.3)	0.80 [0.37 – 1.76]	0.60

* p-value calculated with Fisher's exact test

CI – confidence interval; TIMI – thrombolysis in myocardial infarction; IRA – infarct-related artery; PCI – percutaneous coronary intervention; cTFC – corrected TIMI frame count.

Supplementary table S2. Baseline characteristics of direct stenting versus conventional stenting in patients with high thrombus burden on initial angiography

	DS (n=150)	CS (n=199)	p-value
Patient characteristics			
Demographics			
Age – years	60 + 12	64 + 11	0.007
Female sex – no. (%)	39 (26.0)	45 (22.6)	0.46
Caucasian – no. (%)	133 (89.3) / 149	182 (92.4) / 197	0.31
BMI - kg/m^2	28 + 5 / 95	27 + 4 / 140	0.29

Cardiovascular risk factors – no. (%)			
Hypertension	47 (31.5) / 149	77 (39.5) / 195	0.13
Diabetes mellitus	25 (17.0) / 247	32 (16.2) / 197	0.85
Dyslipidemia	30 (21.4) / 140	49 (25.8) / 190	0.36
Smoking	65 (45.5) / 143	83 (43.0) / 193	0.66
Family history of cardiovascular disease	51 (35.9) / 142	82 (43.6) / 188	0.16
Medical history			
Previous PCI	12 (8.0) / 150	24 (12.1) / 198	0.21
Previous myocardial infarction	7 (4.7) / 150	19 (9.6) / 198	0.08
Presentation			
Onset symptoms to first medical contact – min	50 [29 – 109]	64 [30 – 116]	0.09
Crushed prasugrel – no. (%)	68 (45.3)	95 (47.7)	0.66
Procedural characteristics			
Culprit vessel – no. (%)			
LAD	49 (32.7) / 150	81 (40.9) / 198	0.12
Cx	23 (15.3) / 150	37 (18.7) / 198	0.41
RCA	76 (50.7) / 150	78 (39.4) / 198	0.036
Multivessel disease – no. (%)	62 (41.3) / 150	91 (45.7) / 198	0.41
Angiographic parameters pre-PCI			
Onset symptoms to wire crossing – min	131 [101 – 192]	150 [111 – 220]	0.06
TIMI 3 flow IRA pre-PCI – no.(%)	58 (39.2) / 148	41 (20.6) / 199	<0.001
Postdilatation	75 (50.0)	124 (62.3)	0.021
Total procedural time – min	28 [23 – 39]	35 [27 – 49]	<0.001

BMI – body mass index; PCI – percutaneous coronary intervention; LAD – left anterior descending; Cx – circumflex; RCA – right coronary artery; TIMI – thrombolysis in myocardial infarction; IRA – infarct-related artery.

Supplementary table S3. Crude reperfusion and clinical outcomes of direct stenting versus conventional stenting in patients with high thrombus burden on initial angiography

	DS	CS	Odds ratio (95%CI)	p-value
Stent dimensions in culprit lesion				
Cumulative stent length – mm	23 [28 – 31]	32 [23 – 47]	-	<0.001
Diameter - mm	3.23 + 0.48	3.15 + 0.50	-	0.18
One DES – no. (%)	100/129 (77.5)	107/184 (58.2)	2.48 [1.50 – 4.12]	<0.001
Early reperfusion parameters post-PCI				
TIMI 3 flow in the IRA – no. (%)	132 (91.7)	173 (91.5)	1.02 [0.47 – 2.22]	0.97
TIMI blush grade 3 – no. (%)	62 (62.6)	59 (53.6)	1.45 [0.83 – 2.52]	0.19
cTFC – frames/second	16 [12 – 24]	20 [13 – 29]	-	0.018
cTFC ≤ 23 frames/sec – no. (%)	92/129 (71.3)	106/175 (60.6)	1.62 [0.99 – 2.64]	0.053
Complete ST-segment resolution – no. (%)	95 (72.0)	93 (58.5)	1.82 [1.11 – 2.99]	0.017
Clinical outcomes (1 year) – no. (%)				
All-cause mortality	0/147 (0.0)	3/193 (1.6)	-	0.26*

Cardiac death	0/147 (0.0)	1/193 (0.5)	-	1.00*
Myocardial re-infarction	7/147 (4.8)	7/193 (3.6)	1.33 [0.46 – 3.87]	0.60
Target lesion failure	4/147 (2.7)	3/193 (1.6)	1.73 [0.38 – 7.87]	0.47*
Stent thrombosis	1/147 (0.7)	2/193 (1.0)	0.65 [0.06 – 7.28]	1.00*
Stroke	0/147 (0.0)	1/193 (0.5)	-	1.00*
Urgent revascularization	5/147 (3.4)	3/193 (1.6)	2.23 [0.52 – 9.49]	0.30*
Target lesion revascularization	2/147 (1.4)	2/193 (1.0)	1.32 [0.18 – 9.46]	1.00*
Composite of death and stent thrombosis	1/147 (0.7)	5/193 (2.6)	0.26 [0.03 – 2.22]	0.24*
Composite of death, myocardial re-infarction, stroke, stent thrombosis and urgent revascularization	8/147 (5.4)	11/193 (5.7)	0.95 [0.37 – 2.43]	0.92

* p-value calculated with Fisher's exact test

DS – direct stenting; CS – conventional stenting; CI – confidence interval; TIMI – thrombolysis in myocardial infarction; IRA – infarct-related artery; PCI – percutaneous coronary intervention; cTFC – corrected TIMI frame count.