

## SUPPLEMENTARY DATA

Table 1 of the supplementary data. Univariate analysis of myocardial blush

	<b>Blush &lt; 2 N = 52</b>	<b>Blush ≥ 2 N = 156</b>	<b>P</b>
Age	61.9 (1.8)	58.9 (1.4)	.08
Sex (female)	14 (26.9)	32 (2.5)	.33
Hypertension	28 (53.8)	60 (38.5)	.05
Diabetes	10 (19.2)	25 (16)	.59
Hypercholesterolemia	20 (38.4)	61 (39.1)	.93
Smoking	31 (59.6)	13 (8.3)	.40
Previous myocardial infarction	4 (7.6)	6 (3.8)	.27
Previous percutaneous coronary intervention	2 (3.8)	5 (3.2)	1.00
Creatinine clearance levels < 60 mL/min	17 (32.7)	19 (12.1)	<.001
Total ischemic time	188 (124-300)	170 (125-260)	.63
First medical contact to balloon time	91 (73-131)	80 (65-111)	.05
Systolic blood pressure at admission	118 (3.9)	128 (27.8)	.03
Heart rate at admission	72.8 (16.3)	71.7 (15.2)	.66
Shock	5 (9.6)	0 (0)	<.001
ST-elevation at admission	11.4 (6.9)	12.3 (7.6)	.44
Culprit lesion in left anterior descending coronary artery	23 (44.2)	59 (37.8)	.41
TIMI grade ≥ flow 2 at diagnosis	5 (9.6)	22 (14.1)	.40
Rentrop ≥ 2	5 (9.6)	28 (17.9)	.15
Type of thrombus ≥ 4	26 (50)	68 (43.6)	.42
RVD <sup>a</sup>	2.68 (0.41)	2.85 (0.44)	.02
Lesion length	14.4 (5.3)	13.5 (5.4)	.30
MLD <sup>b</sup>	2.83 (0.39)	2.99 (0.44)	.02
Stent to artery ratio	1.06 (0.08)	1.05 (0.08)	.87
Postoperative TIMI grade 3 flow	44 (84.6)	149 (95.5)	.009

Quantitative variables with normal distribution are expressed as means and standard deviation (SD), variables with non-normal distribution as median and interquartile range, and categorical variables are expressed as absolute values and percentages. TIMI, Thrombolysis in Myocardial Infarction.

<sup>a</sup>RVD, reference vessel diameter after the procedure.

<sup>b</sup>MLD, maximum lumen diameter after the procedure.

**Table 2 of the supplementary data.** Univariate analysis of ST-segment resolution  $\geq 70\%$

	No resolution N = 94	Resolution N = 113	P
Age	6.5 (11.7)	59 (9.5)	.30
Sex (female)	25(26.6)	20 (17.7)	.12
Hypertension	39 (41.5)	48 (42.5)	.88
Diabetes	25 (26.6)	10 (8.8)	<.001
Hypercholesterolemia	31 (33)	49 (43.3)	.12
Smoking	56 (59.6)	78 (69)	.16
Previous myocardial infarction	1 (1)	8 (7.1)	.042
Previous percutaneous coronary intervention	0 (0)	6 (5.3)	.03
Creatinine clearance levels < 60 mL/min	20 (21.3)	16 (14.1)	.18
Total ischemic time	195 (125-300)	170 (118-256)	.18
First medical contact to balloon time	85 (66-115)	86 (66-122)	.39
Systolic blood pressure at admission	126.1 (32.8)	126.8 (27)	.88
Heart rate at admission	72.1 (16.1)	72.2 (15.3)	.95
Shock	4 (4.2)	1 (0.8)	.18
Culprit lesion in left anterior descending coronary artery	44 (46.8)	38 (33.6)	.05
TIMI grade $\geq 2$ flow at diagnosis	6 (6.4)	21 (18.6)	.009
Rentrop $\geq 2$	20 (21.3)	14 (12.4)	.09
Type of thrombus $\geq 4$	41 (43.6)	54 (47.8)	.55
RVD <sup>a</sup>	2.79 (0.43)	2.82 (0.46)	.62
Lesion length	13.6 (4.9)	13.8 (5.7)	.77
MLD <sup>b</sup>	2.94 (0.42)	2.96 (0.46)	.76
Stent to artery ratio	1.06 (0.08)	1.05 (0.08)	.39
Postoperative TIMI grade 3 flow	81 (86.2)	110 (94)	.003
Blush $\geq 2$	68 (72.3)	87 (77)	.45

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<sup>a</sup>RVD, reference vessel diameter after the procedure.

<sup>b</sup>MLD, maximum lumen diameter after the procedure.

**Table 3 of the supplementary data.** Baseline characteristics. Per protocol analysis

	<b>Rapid deflation N = 102</b>	<b>Slow deflation N = 103</b>	<b>P</b>
Age	59.7 (1.6)	59.7 (1.7)	.98
Sex (female)	26 (25.5)	19 (18.4)	.22
Diabetes	13 (12.7)	20 (19.4)	.19
Hypertension	40 (39.2)	47 (45.6)	.35
Hypercholesterolemia	37 (36.3)	43 (41.7)	.42
Smoking	64 (62.7)	68 (66)	.62
Previous myocardial infarction	13 (12.7)	21 (2.4)	.14
Previous percutaneous coronary intervention	4 (3.9)	6 (5.8)	.52
Previous coronary artery bypass graft	3 (2.9)	4 (3.9)	1
Previous stroke	1 (0.9)	0 (0)	.49
Creatinine clearance levels < 60 mL/min	13 (12.7)	21 (2.4)	.14
Shock	4 (3.9)	1 (1)	.21
Radial access	102 (100)	101 (98)	.21
Number of diseased vessels	1.38 (0.61)	1.46 (0.66)	.41
Total ischemic time	193 (127-295)	169 (120-260)	.15
First medical visit to balloon time	88 (66-130)	80 (65-115)	.19
Preoperative ST-segment elevation (mm)	1.4 (6.7)	12.7 (8.1)	.23

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**Table 4 of the supplementary data.** Procedural characteristics. Per protocol analysis

	Fast deflation, N = 102	Slow deflation, N = 103	P value
<i>Vessel</i>			.47
Left anterior descending coronary artery	44 (42.7)	37 (35.9)	
Left circumflex artery	13 (12.7)	18 (17.5)	
Right coronary artery	45 (43.6)	48 (46.6)	
Preoperative TIMI grade $\geq 2$ flow	10 (9.8)	17 (16.5)	.16
<i>Rentrop</i> $\geq 2$	15 (14.7)	18 (17.5)	.59
<i>Thrombus grade score</i> $\geq 4$	46 (45.1)	48 (46.6)	.83
<i>Drug-eluting stent</i>	99 (97)	97 (94.1)	.50
<i>Percent diameter stenosis</i>	99.2 (3.4)	98.8 (6.6)	.56
<i>RVD*</i>	2.74 (4.2)	2.86 (0.47)	.06
<i>Lesion length</i>	14.10 (5.96)	13.31 (4.57)	.29
<i>Stent diameter</i>	3.22 (0.46)	3.32 (0.58)	.16
<i>Maximum inflation pressure</i>	14.70 (1.46)	14.76 (1.69)	.80
<i>MLD**</i>	2.88 (0.37)	3.00 (0.49)	.04
<i>Minimum lumen diameter</i>	2.62 (0.38)	2.67 (0.49)	.41
<i>Postoperative stenosis</i>	8.94 (4.77)	11.28 (6.33)	.03
<i>Stent to artery ratio</i>	1.05 (0.08)	1.05 (0.08)	.89

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<sup>a</sup>RVD, reference vessel diameter after the procedure.

<sup>b</sup>MLD, maximum lumen diameter after the procedure.

**Table 5 of the supplementary data.** Results. Per protocol analysis

	<b>Fast deflation N = 102</b>	<b>Slow deflation N = 103</b>	<b>P</b>
<i>Myocardial blush <math>\geq 2</math></i>	76 (74.5)	77 (74.7)	.87
<i>Postoperative ST-segment elevation (mm)</i>	4.3 (SD 5.2)	4 (SD 4.7)	.68
<i>ST-segment elevation resolution (mm)</i>	7 (SD 7)	8.6 (SD 8.1)	.14
<i>Percentage of resolution (%)</i>	66.4 (SD 33.3)	66.4 (SD 34.1)	.70
<i>ST-segment resolution <math>\geq 70\%</math></i>	53 (51.9)	57 (55.3)	.68
<i>Postoperative TIMI grade flow</i>			.57
0	1 (0.9)	0 (0)	
1	0 (0)	0 (0)	
2	5 (4.9)	8 (7.8)	
3	96 (94.1)	95 (92.2)	
<i>Maximum troponin-i levels</i>	47.4 (14-130)	71 (26-141)	.12
<i>Ejection fraction at discharge</i>	53.8 (SD 8.6)	54.7 (SD 8.7)	.46
<i>Ejection fraction at 12 months</i>	57.4 (SD 8.2)	57.8 (SD 6.5)	.69
<i>In-hospital mortality rate</i>	1 (0.9)	2 (1.9)	1.00
<i>Overall mortality rate at 12 months</i>	3 (2.9)	3 (2.9)	1.00
<i>Cardiovascular mortality rate at 12 months</i>	2 (1.9)	3 (2.9)	1.00
<i>Myocardial infarction</i>	1 (0.9)	1 (0.9)	1.00
<i>Target vessel revascularization</i>	0 (0)	1 (0.9)	1.00

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Supplementary data. CONSORT checklist



CONSORT 2010 checklist

Section/Topic	Item No	Checklist item	Reported on page No
Title and abstract	1a	Identification as a randomised trial in the title	Checked
	1b	Structured summary of trial design, methods, results, and conclusions (for specific guidance see CONSORT for abstracts)	Checked
Introduction	2a	Scientific background and explanation of rationale	Checked
	2b	Specific objectives or hypotheses	Checked
Methods	3a	Description of trial design (such as parallel, factorial) including allocation ratio	Checked
	3b	Important changes to methods after trial commencement (such as eligibility criteria), with reasons	N/A
Participants	4a	Eligibility criteria for participants	Checked
	4b	Settings and locations where the data were collected	Checked
Interventions	5	The interventions for each group with sufficient details to allow replication, including how and when they were actually administered	Checked
Outcomes	6a	Completely defined pre-specified primary and secondary outcome measures, including how and when they were assessed	Checked
	6b	Any changes to trial outcomes after the trial commenced, with reasons	N/A
Sample size	7a	How sample size was determined	Checked
	7b	When applicable, explanation of any interim analyses and stopping guidelines	Checked
Randomisation: Sequence generation	8a	Method used to generate the random allocation sequence	Checked
	8b	Type of randomisation; details of any restriction (such as blocking and block size)	Checked
Allocation concealment mechanism	9	Mechanism used to implement the random allocation sequence (such as sequentially numbered containers), describing any steps taken to conceal the sequence until interventions were assigned	Checked
	10	Who generated the random allocation sequence, who enrolled participants, and who assigned participants to interventions	Checked
Blinding	11a	If done, who was blinded after assignment to interventions (for example, participants, care providers, those	Checked
Statistical methods	11b	assessing outcomes) and how	N/A
	12a	If relevant, description of the similarity of interventions	Checked
	12b	Statistical methods used to compare groups for primary and secondary outcomes	Checked
Results	12b	Methods for additional analyses, such as subgroup analyses and adjusted analyses	Checked
	13a	For each group, the numbers of participants who were randomly assigned, received intended treatment, and were analysed for the primary outcome	Checked
Participant flow (a diagram is strongly recommended)	13b	For each group, losses and exclusions after randomisation, together with reasons	Checked
	14a	Dates defining the periods of recruitment and follow-up	Checked
Recruitment	14b	Why the trial ended or was stopped	Checked
	15	A table showing baseline demographic and clinical characteristics for each group	Checked
Baseline data	16	For each group, number of participants (denominator) included in each analysis and whether the analysis was by original assigned groups	Checked
Numbers analysed	17a	For each primary and secondary outcome, results for each group, and the estimated effect size and its precision (such as 95% confidence interval)	N/A
	17b	For binary outcomes, presentation of both absolute and relative effect sizes is recommended	Checked
Outcomes and estimation	18	Results of any other analyses performed, including subgroup analyses and adjusted analyses, distinguishing pre-specified from exploratory	Checked
Ancillary analyses	19	All important harms or unintended effects in each group (for specific guidance see CONSORT for harms)	N/A
Harms	20	Trial limitations, addressing sources of potential bias, imprecision, and, if relevant, multiplicity of analyses	Checked
Discussion	21	Generalisability (external validity, applicability) of the trial findings	Checked
Limitations	22	Interpretation consistent with results, balancing benefits and harms, and considering other relevant evidence	N/A
Generalisability	23	Registration number and name of trial registry	N/A
Interpretation	24	Where the full trial protocol can be accessed, if available	N/A
Other information	25	Sources of funding and other support (such as supply of drugs), role of funders	Checked
Registration			
Protocol			
Funding			

\*We strongly recommend reading this statement in conjunction with the CONSORT 2010 Explanation and Elaboration for important clarifications on all the items. If relevant, we also recommend reading CONSORT extensions for cluster randomised trials, non-inferiority and equivalence trials, non-pharmacological treatments, herbal interventions, and pragmatic trials. Additional extensions are forthcoming: for those and for up to date references relevant to this checklist, see [www.consort-statement.org](http://www.consort-statement.org).