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Contributors The idea of the study was conceived by BMM and EDS. BMM, EDS, MN, KAW and RJW were involved in the design of the experiment. The experimental work was carried out by MN, KM and JW. MB conducted the statistical analysis of the data. MN wrote the first draft of the manuscript, and all authors participated in the finalisation of the manuscript.

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Competing interests None.

Patient consent Obtained.

Ethics approval University of Cape Town Human Research Ethics Committee.

Provenance and peer review Not commissioned; externally peer reviewed.

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REFERENCES

1. Imazio M, Brucato A, Maestroni S, *et al*. Risk of constrictive pericarditis after Acute pericarditis. *Circulation* 2011;**124**:1270–5.
2. Castoldi G, di Gioia CR, Bombardi C, *et al*. Prevention of myocardial fibrosis by N-acetyl-seryl-aspartyl-lysyl-proline in diabetic rats. *Clin Sci (Lond)* 2009;**118**:211–20.
3. Henderson NC, Mackinnon AC, Farnworth SL, *et al*. Galectin-3 expression and secretion links macrophages to the promotion of renal fibrosis. *Am J Pathol* 2008;**172**:288–98.
4. Liu YH, D'Ambrosio M, Liao TD, *et al*. N-acetyl-seryl-aspartyl-lysyl-proline prevents cardiac remodeling and dysfunction induced by galectin-3, a mammalian adhesion/growth-regulatory lectin. *Am J Physiol Heart Circ Physiol* 2009;**296**:H404–12.
5. Cavaasin MA, Liao TD, Yang XP, *et al*. Decreased endogenous levels of Ac-SDKP promote organ fibrosis. *Hypertension* 2007;**50**:130–6.

RETRACTION: NOTICE OF UNRELIABLE FINDINGS

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Piccolo R, L Gu Y L, Iversen A Z, Dominguez-Rodriguez A, De Smet B J G L, Mahmoud K D, Eitel I, Abreu-Gonzalez P, Thiele H, Piscione F. Clinical impact of intracoronary abciximab in patients undergoing primary percutaneous coronary intervention: an individual patient-data pooled analysis of randomised studies. *Heart* 2012 May 24 [Epub ahead of print] doi:10.1136/heartjnl-2011-301101. The findings in this paper are unreliable because it fails to address the data from AIDA STEMI [*Lancet* 2012;**379**:923–31], to which the authors had access prior to submission and which contraindicate the paper's conclusion by showing no advantage for intracoronary administration. The authors were asked to update the paper to include the AIDA STEMI findings but, with the exception of Dr Olivier F Bertrand, they declined. Owing to this difference of opinion, Dr Bertrand asked to be removed from the list of authors, a request to which we acceded. Under these circumstances, the matter was considered by COPE who recommended retraction and this paper has now been withdrawn from *Heart*.

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SUPPLEMENTARY MATERIALS

Piccolo R, Gu YL, Iversen AZ, Dominguez-Rodriguez A, de Smet B JGL, Mahmoud KD, Eitel I, Abreu-Gonzalez P, Bertrand OF, Thiele H, and Piscione F

Clinical Impact of Intracoronary Abciximab in Patients Undergoing Primary Percutaneous Coronary Intervention: an Individual Patient-Data Pooled Analysis of Randomized Studies

eMethods – Search Strategy.

eTable 1A – Clinical characteristics of the study population in the CICERO Trial.

eTable 1B – Clinical characteristics of the study population in the study of Dominguez-Rodriguez et al.

eTable 1C – Clinical characteristics of the study population in the EASY-MI Trial.

eTable 1D – Clinical characteristics of the study population in the study of Iversen et al.

eTable 1E – Clinical characteristics of the study population in the study of Thiele et al.

eTable 2 – Univariate and Multivariate Predictors of Death and Reinfarction.

eMethods – Search Strategy.

Search strategy for PubMed:

((("random allocation"[MeSH Terms] OR ("random"[All Fields] AND "allocation"[All Fields]) OR "random allocation"[All Fields] OR "randomized"[All Fields]) AND ("clinical trials as topic"[MeSH Terms] OR ("clinical"[All Fields] AND "trials"[All Fields] AND "topic"[All Fields]) OR "clinical trials as topic"[All Fields] OR "trial"[All Fields])) AND ("myocardial infarction"[MeSH Terms] OR ("myocardial"[All Fields] AND "infarction"[All Fields]) OR "myocardial infarction"[All Fields]) OR (ST-segment[All Fields] AND elevation[All Fields]) AND (percutaneous[All Fields] AND ("heart"[MeSH Terms] OR "heart"[All Fields] OR "coronary"[All Fields]) AND ("Intervention (Amstelveen)"[Journal] OR "intervention"[All Fields])) OR (primary[All Fields] AND percutaneous[All Fields] AND ("heart"[MeSH Terms] OR "heart"[All Fields] OR "coronary"[All Fields]) AND ("Intervention (Amstelveen)"[Journal] OR "intervention"[All Fields])) OR (primary[All Fields] AND ("angioplasty"[MeSH Terms] OR "angioplasty"[All Fields])) AND (("platelet glycoprotein gpiib-iii_a complex"[MeSH Terms] OR ("platelet"[All Fields] AND "glycoprotein"[All Fields] AND "gpiib-iii_a"[All Fields] AND "complex"[All Fields]) OR "platelet glycoprotein gpiib-iii_a complex"[All Fields] OR ("glycoprotein"[All Fields] AND "iib iii_a"[All Fields]) OR "glycoprotein iib iii_a"[All Fields]) AND ("antagonists and inhibitors"[Subheading] OR ("antagonists"[All Fields] AND "inhibitors"[All Fields]) OR "antagonists and inhibitors"[All Fields] OR "inhibitors"[All Fields])) AND ("1"[PDAT] : "2010/11/15"[PDAT]) AND ("1"[PDAT] : "2010/11/15"[PDAT]))

Search strategy for EMBASE:

randomized AND trial AND myocardial AND ('infarction'/exp OR infarction) OR 'st segment'/exp OR 'st segment' AND elevation AND percutaneous AND coronary AND intervention OR primary AND percutaneous AND coronary AND intervention OR primary AND ('angioplasty'/exp OR angioplasty) AND ('abciximab'/exp OR abciximab) AND intracoronary AND ('glycoprotein'/exp OR glycoprotein) AND inhibitors.

eTable 1A - Clinical characteristics of the study population in the CICERO Trial.

	Intracoronary abciximab (n=271)	Intravenous abciximab (n=263)	P
Age, yrs	64±13	64±13	0.94
Male, n (%)	208 (76.8)	187 (71.1)	0.14
Hypertension, n (%)	119 (43.9)	129 (49)	0.23
Dyslipidemia, n (%)	80 (29.5)	74 (28.1)	0.72
Current smoker, n (%)	116 (42.8)	127 (48.3)	0.20
Diabetes, n (%)	36 (13.3)	29 (11)	0.42
Family CAD history, n (%)	125 (46.1)	124 (47.1)	0.81
Previous MI, n (%)	32 (11.8)	23 (8.7)	0.24
Previous revascularization, n (%)	25 (9.2)	25 (9.5)	0.91
Time to reperfusion, min*	225±154	231±157	0.64
Thrombectomy, n (%)	266 (98.2)	255 (97)	0.37
Clopidogrel 600 mg loading dose, n (%)	271 (100)	261 (99.2)	0.24
Drug-eluting stent, n (%)	48 (17.7)	46 (17.5)	0.94
Anterior myocardial infarction, n (%)	124 (45.8)	129 (49)	0.45
Diseased vessel, n (%)			0.29
1	123 (45.4)	101 (38.7)	
2	78 (28.8)	84 (32.2)	
3	70 (25.8)	76 (29.1)	
Infarct-related vessel, n (%)			0.72
No infarct-related artery	0	0	
Left anterior descending	121 (44.6)	124 (47.1)	
Left circumflex	33 (12.2)	34 (12.9)	
Right coronary	114 (42.1)	100 (38)	
Left main	3 (1.1)	5 (1.9)	
Saphenous-vein graft	0	0	
TIMI flow grade pre-PCI, n (%)			0.05
0	125 (46.1)	145 (55.1)	
1	25 (9.2)	31 (11.8)	
2	64 (23.6)	49 (18.6)	
3	57 (21)	38 (14.4)	
TIMI flow grade post-PCI, n (%)			0.39
0	1 (0.4)	0	
1	2 (0.7)	1 (0.4)	
2	26 (9.6)	35 (13.4)	
3	241 (89.3)	226 (86.3)	

eTable 1B - Clinical characteristics of the study population in the study of Dominguez-Rodriguez et al.

	Intracoronary abciximab (n=50)	Intravenous abciximab (n=50)	P
Age, yrs	66±17	69±15	0.51
Male, n (%)	18 (72)	20 (80)	0.51
Hypertension, n (%)	14 (56)	13 (52)	0.78
Dyslipidemia, n (%)	17 (68)	22 (88)	0.09
Current smoker, n (%)	22 (88)	20 (80)	0.70
Diabetes, n (%)	13 (52)	15 (60)	0.57
Family CAD history, n (%)	2 (8)	3 (12)	1.00
Previous MI, n (%)	4 (16)	4 (16)	1.00
Previous revascularization, n (%)	0	0	----
Time to reperfusion, min*	142±42	151±26	0.39
Thrombectomy, n (%)	25 (100)	25 (100)	----
Clopidogrel 600 mg loading dose, n (%)	0	0	----
Drug-eluting stent, n (%)	25 (100)	25 (100)	----
Anterior myocardial infarction, n (%)	14 (56)	16 (64)	0.56
Diseased vessel, n (%)			0.82
1	13 (52)	15 (60)	
2	9 (36)	8 (32)	
3	3 (12)	2 (8)	
Infarct-related vessel, n (%)			0.77
No infarct-related artery	0	0	
Left anterior descending	14 (56)	16 (64)	
Left circumflex	6 (24)	4 (16)	
Right coronary	5 (20)	5 (20)	
Left main	0	0	
Saphenous-vein graft	0	0	
TIMI flow grade pre-PCI, n (%)			1.00
0	21 (84)	20 (80)	
1	4 (16)	5 (20)	
2	0	0	
3	0	0	
TIMI flow grade post-PCI, n (%)			0.13
0	0	0	
1	0	3 (12)	
2	3 (12)	5 (20)	
3	22 (88)	17 (68)	

eTable 1C - Clinical characteristics of the study population in the EASY-MI Trial.

	Intracoronary abciximab (n=53)	Intravenous abciximab (n=52)	P
Age, yrs	59±9	59±9	0.96
Male, n (%)	41 (77.4)	43 (82.7)	0.49
Hypertension, n (%)	23 (43.3)	23 (44.2)	0.93
Dyslipidemia, n (%)	24 (45.3)	26 (50)	0.63
Current smoker, n (%)	37 (69.8)	40 (76.9)	0.41
Diabetes, n (%)	4 (7.5)	5 (9.6)	0.74
Family CAD history, n (%)	35 (66)	37 (71.2)	0.52
Previous MI, n (%)	6 (11.3)	9 (17.3)	0.38
Previous revascularization, n (%)	3 (5.7)	7 (13.5)	0.20
Time to reperfusion, min*	177±73	177±77	0.97
Thrombectomy, n (%)	21 (39.6)	23 (44.2)	0.63
Clopidogrel 600 mg loading dose, n (%)	47 (88.7)	37 (71.2)	0.02
Drug-eluting stent, n (%)	50 (94.3)	50 (96.2)	1.00
Anterior myocardial infarction, n (%)	17 (32.1)	16 (30.8)	0.88
Diseased vessel, n (%)			0.52
1	30 (56.6)	35 (67.3)	
2	17 (32.1)	13 (25)	
3	6 (11.3)	4 (7.7)	
Infarct-related vessel, n (%)			0.48
No infarct-related artery	0	0	
Left anterior descending	22 (41.5)	21 (40.4)	
Left circumflex	5 (9.4)	2 (3.8)	
Right coronary	26 (49.1)	29 (55.8)	
Left main	0	0	
Saphenous-vein graft	0	0	
TIMI flow grade pre-PCI, n (%)			0.68
0	30 (56.6)	31 (59.6)	
1	6 (11.3)	8 (15.4)	
2	14 (26.4)	9 (17.3)	
3	3 (5.7)	4 (7.7)	
TIMI flow grade post-PCI, n (%)			0.46
0	1 (1.9)	0	
1	0	0	
2	3 (5.7)	5 (9.6)	
3	49 (92.5)	47 (90.4)	

eTable 1D - Clinical characteristics of the study population in the study of Iversen et al.

	Intracoronary abciximab (n=185)	Intravenous abciximab (n=170)	P
Age, yrs	61±11	62±11	0.76
Male, n (%)	151 (81.6)	135 (79.4)	0.60
Hypertension, n (%)	73 (39.5)	68 (40)	0.92
Dyslipidemia, n (%)	80 (43.2)	67 (39.4)	0.46
Current smoker, n (%)	92 (49.7)	89 (52.4)	0.62
Diabetes, n (%)	26 (14.1)	18 (10.6)	0.32
Family CAD history, n (%)	71 (38.4)	54 (31.8)	0.19
Previous MI, n (%)	35 (18.9)	30 (17.6)	0.76
Previous revascularization, n (%)	35 (18.9)	30 (17.6)	0.76
Time to reperfusion, min*	----	----	
Thrombectomy, n (%)	0	0	----
Clopidogrel 600 mg loading dose, n (%)	178 (96.2)	163 (95.9)	0.87
Drug-eluting stent, n (%)	147 (79.5)	133 (78.2)	0.78
Anterior myocardial infarction, n (%)	79 (42.7)	78 (45.9)	0.55
Diseased vessel, n (%)			0.49
1	119 (64.3)	118 (69.4)	
2	43 (23.2)	31 (18.2)	
3	23 (12.4)	21 (12.4)	
Infarct-related vessel, n (%)			0.53
No infarct-related artery	2 (1.1)	0	
Left anterior descending	88 (47.6)	86 (50.6)	
Left circumflex	16 (8.6)	16 (9.4)	
Right coronary	79 (42.7)	68 (40)	
Left main	0	0	
Saphenous-vein graft	0	0	
TIMI flow grade pre-PCI, n (%)			0.12
0	134 (72.4)	132 (77.6)	
1	19 (10.3)	21 (12.4)	
2	16 (8.6)	5 (2.9)	
3	16 (8.6)	12 (7.1)	
TIMI flow grade post-PCI, n (%)			0.33
0	2 (1.1)	4 (2.4)	
1	8 (4.3)	12 (7.1)	
2	26 (14.1)	39 (17.6)	
3	149 (80.5)	124 (72.9)	

eTable 1E - Clinical characteristics of the study population in the study of Thiele et al.

	Intracoronary abciximab (n=77)	Intravenous abciximab (n=77)	P
Age, yrs	62±11	64±11	0.28
Male, n (%)	63 (81.8)	59 (76.6)	0.43
Hypertension, n (%)	54 (70.1)	57 (74)	0.59
Dyslipidemia, n (%)	27 (35.1)	31 (40.3)	0.51
Current smoker, n (%)	38 (49.4)	39 (50.6)	0.87
Diabetes, n (%)	24 (31.2)	22 (28.6)	0.72
Family CAD history, n (%)	20 (26)	21 (27.3)	0.85
Previous MI, n (%)	8 (10.4)	7 (9.1)	0.79
Previous revascularization, n (%)	7 (9.1)	7 (9.1)	1.00
Time to reperfusion, min*	297±175	274±175	0.43
Thrombectomy, n (%)	0	0	----
Clopidogrel 600 mg loading dose, n (%)	77 (100)	77 (100)	1.00
Drug-eluting stent, n (%)	58 (75.3)	51 (66.2)	0.21
Anterior myocardial infarction, n (%)	44 (57.1)	40 (51.9)	0.52
Diseased vessel, n (%)			0.89
1	40 (51.9)	37 (48.1)	
2	24 (31.2)	26 (33.8)	
3	13 (16.9)	14 (18.2)	
Infarct-related vessel, n (%)			0.42
No infarct-related artery	0	0	
Left anterior descending	42 (54.5)	35 (45.5)	
Left circumflex	8 (10.4)	10 (13)	
Right coronary	27 (35.1)	29 (37.7)	
Left main	0	1 (1.3)	
Saphenous-vein graft	0	2 (2.6)	
TIMI flow grade pre-PCI, n (%)			0.51
0	44 (57.1)	52 (67.5)	
1	9 (11.7)	5 (6.5)	
2	6 (7.8)	4 (5.2)	
3	18 (23.4)	16 (20.8)	
TIMI flow grade post-PCI, n (%)			0.90
0	1 (1.3)	2 (2.6)	
1	1 (1.3)	1 (1.3)	
2	10 (13)	8 (10.4)	
3	65 (84.4)	66 (85.7)	

eTable 2 - Univariate and Multivariate Predictors of Death and Reinfarction

	Univariate Predictors				Multivariate Predictors			
Parameter	β	SE	Hazard Ratio (95% CI)	p-value	B	SE	Hazard Ratio (95% CI)	p-value
Age	0.055	0.012	1.06 (1.03-1.08)	<0.001	0.046	0.13	1.05 (1.02-1.07)	<0.001
Three-vessel disease	1.222	0.285	3.39 (1.94-5.93)	<0.001	1.016	0.291	2.76 (1.56-4.88)	<0.001
Previous MI	0.867	0.322	2.38 (1.26-4.48)	0.007	0.698	0.325	2.01 (1.06-3.80)	0.03
Hypertension	0.501	0.289	1.65 (0.94-2.91)	0.08				
Anterior MI	0.467	0.287	1.59 (0.91-2.79)	0.10				
Intracoronary abciximab	-0.62	0.295	0.54 (0.30-0.95)	0.03	-0.576	0.295	0.56 (0.31-1.00)	0.05

All p values are from Cox proportional hazard model. Variables tested in models: Age, Sex, Hypertension, Dyslipidemia, Current smoker, Diabetes, Family history for coronary artery disease, Previous myocardial infarction, Previous revascularization, Thrombectomy, Clopidogrel 600 mg loading dose, drug-eluting stent implantation, anterior myocardial infarction, diseased vessel, infarct-related vessel, TIMI flow grade pre-procedure, TIMI flow grade post-procedure.

MI= myocardial infarction.