

STEMI: revascularisation complète ou artère responsable seule?

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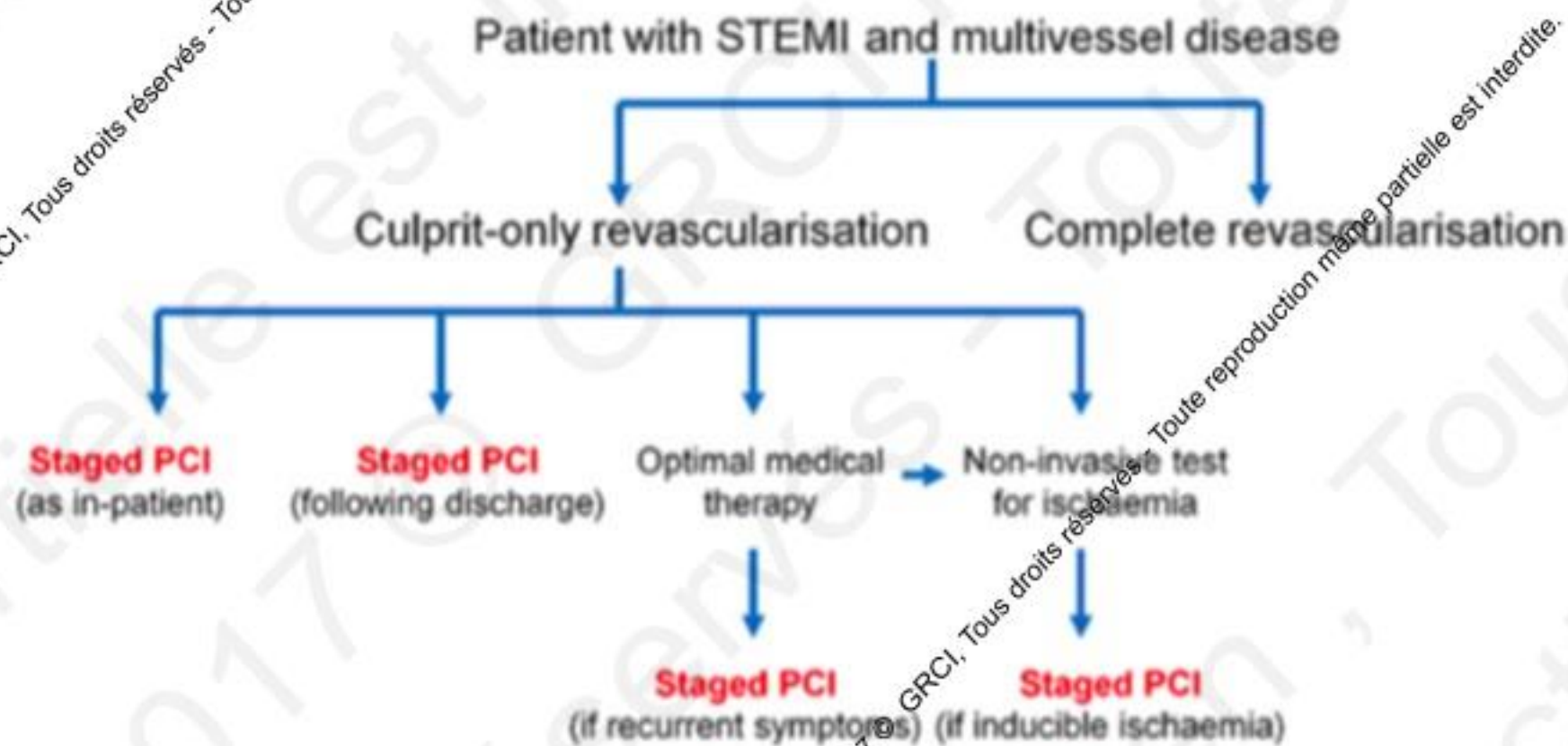
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Introduction

- Traiter l'artère coupable chez un patient présentant un STEMI: **LE TRAITEMENT DE CHOIX.**
- Environ 50% de ces patients sont **PLURITRONCULAIRES** et ont un plus mauvais pronostic que les mono tronculaires.

Plusieurs approches sont possibles pour traiter ces patients:



- La stratégie de cette revascularisation dépend de plusieurs paramètres:

1. Patients:

Age -comorbidités -stabilité hémodynamique-
Fonction VG- fonction rénale –diabète

2. Atteinte pluritronculaire:

Complexité des lésions- SYNTAX score

Nombre de vaisseaux atteints- CTO- calcifications

- la valeur du traitement des lésions autres que l'artère coupable est un débat toujours d'actualité.
- Le choix du moment de ce traitement est souvent laissé à l'opérateur ou au heart team.

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- Le registre New yorkais de l'angioplastie:
« il y a plus d'événements chez le patients traités par une angioplastie multiple **immédiate** vs ceux chez qui seule l'artère coupable est traitée. »

STEMI ESC 2017

- HORIZONS AMI: « la revascularisation complète immédiate est de moins bon pronostic que la revascularisation différée des autres lésions. »

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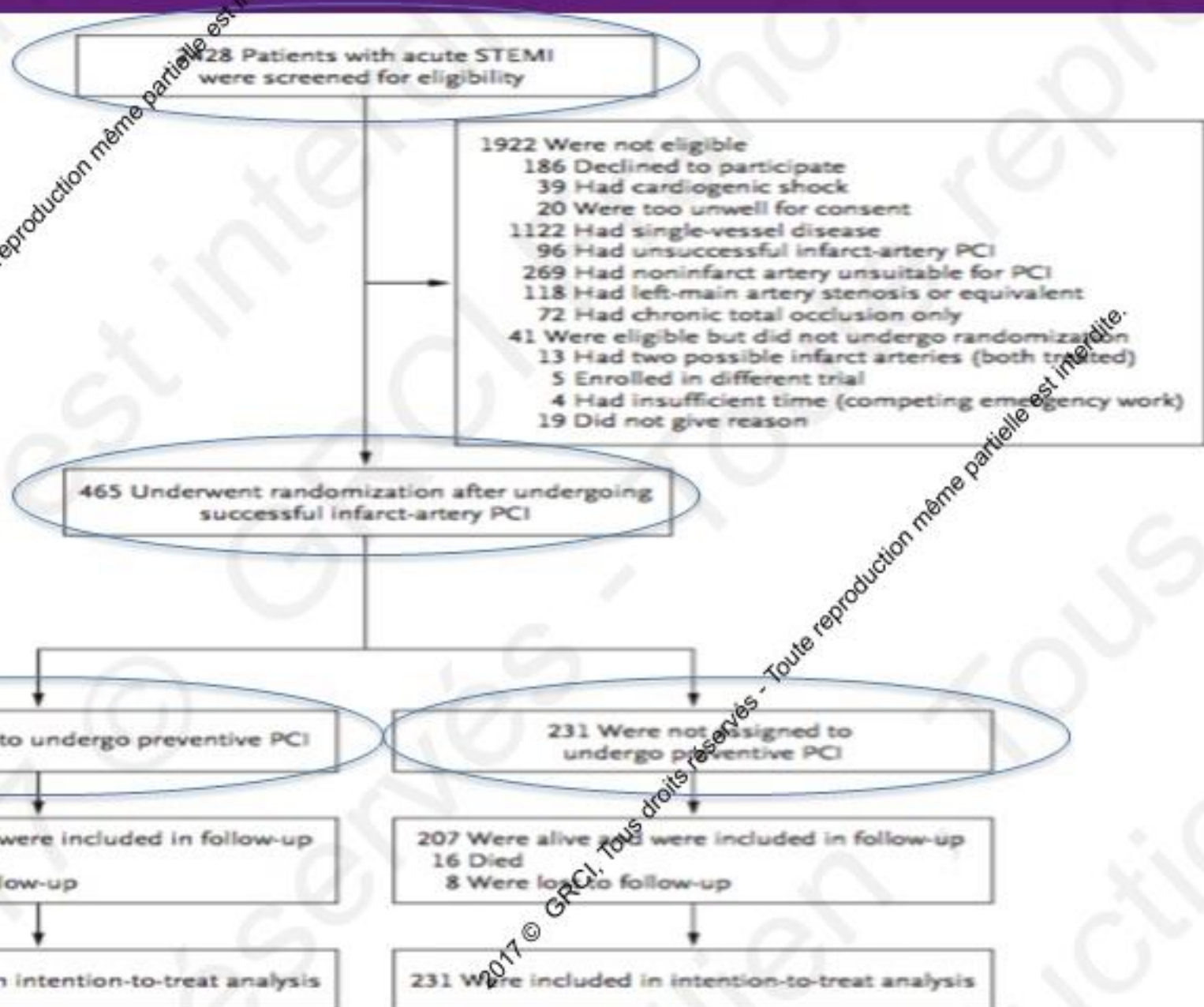
ORIGINAL ARTICLE

Randomized Trial of Preventive Angioplasty in Myocardial Infarction

David S. Wald, M.D., Joan K. Morris, Ph.D., Nicholas J. Wald, F.R.S.,
Alexander J. Chase, M.B., B.S., Ph.D., Richard J. Edwards, M.D.,
Liam O. Hughes, M.D., Colin Berry, M.B., Ch.B., Ph.D.,
and Keith G. Oldroyd, M.D., for the PRAMI Investigators*

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Table 1. Characteristics of the Patients at Baseline.*

| Characteristic | Preventive PCI (N = 234) | No Preventive PCI (N = 231) |
|---|-----------------------------|--------------------------------|
| Mean age (range) — yr | 62 (32–92) | 62 (33–90) |
| Sex — no. (%) | | |
| Male | 177 (76) | 186 (81) |
| Female | 57 (24) | 45 (19) |
| Medical history — no. (%) | | |
| Diabetes | 35 (15) | 48 (21) |
| Hypertension | 94 (40) | 93 (40) |
| Current smoker | 118 (50) | 103 (45) |
| Previous stroke | 10 (4) | 10 (4) |
| Previous myocardial infarction | 19 (8) | 16 (7) |
| Mean blood pressure — mm Hg | | |
| Systolic | 136±26 | 134±26 |
| Diastolic | 81±14 | 80±15 |
| Infarct location — no. (%)† | | |
| Anterior | 67 (29) | 89 (39) |
| Inferior | 154 (66) | 128 (55) |
| Lateral | 10 (4) | 14 (6) |
| Left bundle-branch block — no. (%) | 3 (1) | 0 |
| Arteries with stenosis — no. (%) | | |
| 2 | 143 (61) | 155 (67) |
| 3 | 91 (39) | 76 (33) |
| Proximal or mid portion of left anterior descending coronary artery — no. (%) | 61 (26) | 74 (32) |

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Table 2. Details Regarding PCI and Medical Therapy at Discharge.*

| Variable | Preventive PCI (N = 234) | No Preventive PCI (N = 231) |
|--|-----------------------------|--------------------------------|
| PCI | | |
| Infarct artery | | |
| No. of stents per artery† | 1.56±0.75 | 1.42±0.70 |
| Stent length — mm | 21.8±6.7 | 21.3±5.6 |
| Stent diameter — mm | 3.2±0.4 | 3.2±0.4 |
| Stent type — no. (%) | | |
| Bare-metal | 86 (37) | 96 (42) |
| Drug-eluting | 147 (63) | 135 (58) |
| No stenting‡ | 1 (<1) | 0 |
| Noninfarct artery | | |
| No. of arteries treated per patient | 1.36±0.77 | NA |
| No. of stents per artery | 1.29±0.53 | NA |
| Stent length — mm | 19.4±5.8 | NA |
| Stent diameter — mm | 3.1±0.9 | NA |
| Stent type — no. (%) | | |
| Bare-metal | 58 (25) | NA |
| Drug-eluting | 165 (71) | NA |
| No stenting§ | 11 (5) | NA |
| Use of glycoprotein IIb/IIIa inhibitor or bivalirudin — no. (%) | | |
| Any | 185 (79) | 181 (78) |
| Glycoprotein IIb/IIIa inhibitor | 178 (76) | 176 (76) |
| Bivalirudin | 7 (3) | 5 (2) |
| Medical therapy — no. (%)¶ | | |
| Aspirin | 233 (100) | 229 (100) |
| Clopidogrel, prasugrel, or ticagrelor | 234 (100) | 229 (100) |
| Statin | 222 (95) | 223 (97) |
| Beta-blocker | 207 (88) | 210 (92) |
| ACE inhibitor or angiotensin-receptor blocker | 218 (93) | 209 (91) |
| Calcium-channel blocker | 28 (12) | 26 (11) |
| Nitrate | 38 (16) | 45 (20) |

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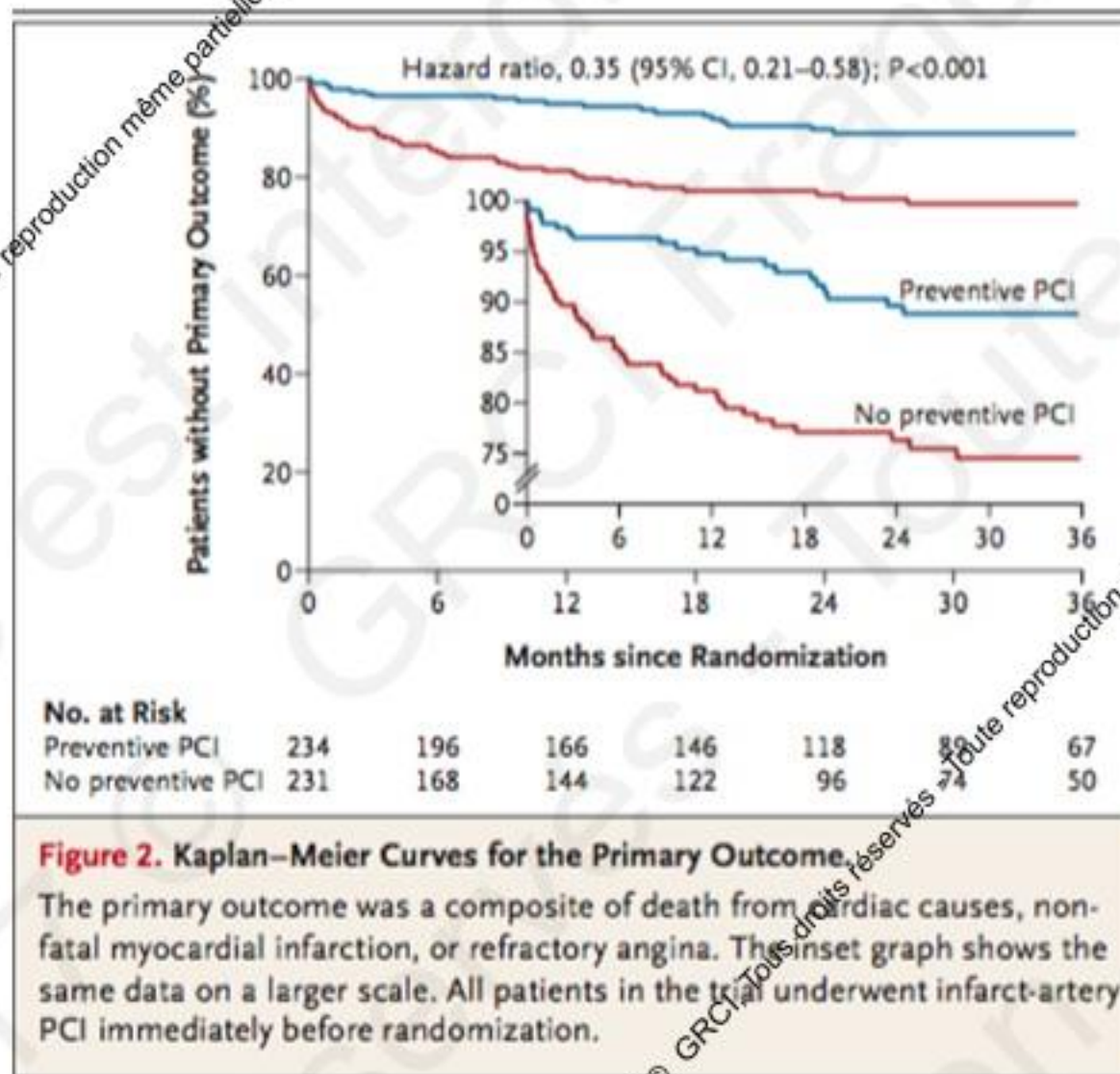


Table 3. Prespecified Clinical Outcomes.*

| Outcome | Preventive PCI (N = 234) | No Preventive PCI (N = 231) | Hazard Ratio (95% CI) | P Value |
|--|--------------------------------|-----------------------------------|--------------------------|---------|
| | no. of events | | | |
| Primary outcome | | | | |
| Death from cardiac causes, nonfatal myocardial infarction, or refractory angina† | 21 | 53 | 0.35 (0.21–0.58) | <0.001 |
| Death from cardiac causes or nonfatal myocardial infarction† | 11 | 27 | 0.36 (0.18–0.73) | 0.004 |
| Death from cardiac causes | 4 | 10 | 0.34 (0.11–1.08) | 0.07 |
| Nonfatal myocardial infarction | 7 | 20 | 0.32 (0.13–0.75) | 0.009 |
| Refractory angina | 12 | 30 | 0.35 (0.18–0.69) | 0.002 |
| Secondary outcomes | | | | |
| Death from noncardiac causes | 8 | 6 | 1.10 (0.38–3.18) | 0.86 |
| Repeat revascularization | 16 | 49 | 0.30 (0.17–0.56) | <0.001 |

* All patients underwent infarct-artery PCI.

† Only the first event per patient is listed.

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L'angioplastie préventive dans PRAMI

1. Sténose > 50% , évaluation angiographique visuelle
2. sans aucun test d'ischémie préalable
3. Intérêt: amélioration des symptômes et non du pronostic?

Les patients du groupe artère coupable:

1. Pas de complément de revascularisation pour les autres lésions comme le stipulent les recommandations.
2. Surveillance: téléphone, test d'ischémie sans intervention invasive.
 - Peut expliquer le % élevé de MACCE dans ce groupe?
 - Plus de décès par évolution naturelle de la maladie plutôt que le choix de la stratégie de revascularisation?

Donc PRAMI

- Ne réponds pas à la question:
Revascularisation complète immédiate VS
revascularisation complète programmée.
- La revascularisation complète, immédiate ou programmée, est une bien meilleure stratégie que de se contenter de traiter l'artère coupable seule.

JOURNAL OF THE AMERICAN COLLEGE OF CARDIOLOGY
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VOL. 65, NO. 10, 2015
ISSN 0735-1097/\$36.00
<http://dx.doi.org/10.1016/j.jacc.2014.12.038>

ORIGINAL INVESTIGATIONS

**Randomized Trial of Complete Versus
Lesion-Only Revascularization in Patients
Undergoing Primary Percutaneous
Coronary Intervention for STEMI
and Multivessel Disease**

The CvLPRIT Trial



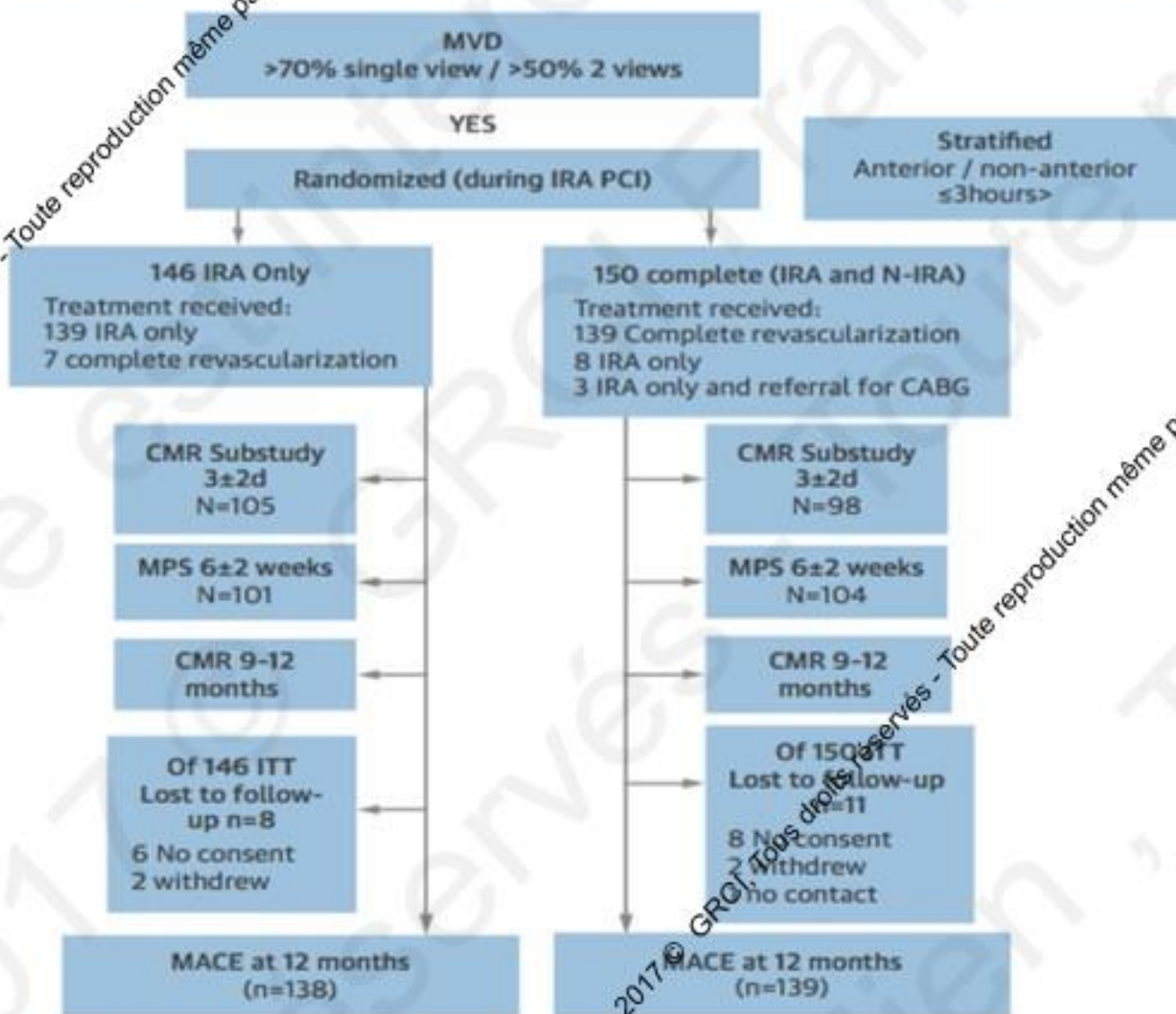
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FIGURE 1 Patient Flow Diagram



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TABLE 1 Demographics and Baseline Clinical Characteristics

| | Complete Revascularization (n = 150) | IRA-Only Revascularization (n = 146) | p Value |
|----------------------------------|--|--|---------|
| Age, yrs | 64.6 ± 11.2 | 65.3 ± 11.9 | 0.57 |
| Male | 128 (85.3) | 112 (76.7) | 0.06 |
| Treated diabetes | 9/147 (12.9) | 20/140 (14.3) | 0.74 |
| Treated hypertension | 54/147 (36.6) | 51/140 (36.4) | 0.96 |
| Treated hypercholesterolemia | 41/147 (27.9) | 34/140 (24.3) | 0.49 |
| Current smoker | 50/146 (34.3) | 37/138 (26.8) | 0.17 |
| Previous MI | 7/147 (4.8) | 5/140 (3.6) | 0.62 |
| Previous PCI | 6/147 (4.1) | 3/140 (2.1) | 0.50 |
| Killip class II/III on admission | 10/147 (6.8) | 13/139 (9.4) | 0.43 |
| GFR <30 mL/min | 1/140 (0.7) | 1/137 (0.7) | 1.00 |
| Anterior MI | 54/150 (36.0) | 52/146 (35.6) | 0.94 |
| IRA site (selected CASS) | | | |
| 1 Proximal RCA | 29 (19.3) | 30 (20.5) | 0.82 |
| 2 Mid RCA | 23 (15.3) | 24 (16.4) | |
| 11 LMS | 0 | 0 | |
| 12 Proximal LAD | 29 (19.3) | 31 (21.2) | |
| 13 Mid LAD | 22 (14.7) | 16 (11.0) | |
| 18 Proximal Cx | 9 (6.0) | 13 (8.9) | |
| Other | 38 (25.3) | 32 (21.9) | |

| | | | |
|-------------------------------------|-------------------------|-------------------------|------|
| N-IRA anatomic site (selected CASS) | | | |
| 1 Proximal RCA | 23 (15.3) | 22 (15.1) | 0.96 |
| 2 Mid RCA | 24 (16.0) | 23 (15.8) | |
| 11 LMS | 1 (0.7) | 2 (1.4) | |
| 12 Proximal LAD | 27 (18.0) | 27 (18.4) | |
| 13 Mid LAD | 44 (29.3) | 49 (33.6) | |
| 18 Proximal Cx | 20 (13.3) | 20 (13.7) | |
| Other | 11 (7.3) | 9 (6.2) | |
| N-IRA stenoses >70% | 131 (87.3) | 118 (80.8) | |
| 2-Vessel disease | 130 (79.3) | 110 (75.3) | 0.41 |
| 3-Vessel disease | 31 (20.7) | 36 (24.7) | |
| Symptom to balloon time, min | 182 (115-282) | 159 (119-265) | 0.41 |
| Maximum HS-TnT elevation | 985 (629-1,625) | 1073 (509-1,824) | 0.96 |
| EF (by CMR), % | 45.8 ± 9.8 (n = 100) | 45.1 ± 9.5 (n = 103) | 0.57 |
| Balloon pump | 2 (1) | 1 (0.6) | 1.00 |
| Radial approach | 112/146 (76.7) | 102/140 (72.9) | 0.45 |

TABLE 2 Periprocedural Details, Discharge Medication, and Ischemia Testing

| | Complete Revascularization (n = 150) | IRA-Only Revascularization (n = 146) | p Value |
|-----------------------------------|--|--|---------|
| ASA | 141/142 (99.3) | 131/135 (97.0) | 0.16 |
| Plus clopidogrel | 59/144 (41.0) | 54/138 (39.1) | 0.75 |
| Plus ticagrelor | 19/144 (13.2) | 18/135 (13.3) | 0.97 |
| Plus prasugrel | 58/144 (40.3) | 64/138 (46.4) | 0.30 |
| Plus warfarin | 1/147 (0.7) | 2/138 (1.5) | 0.61 |
| GPI | 46/145 (31.7) | 44/139 (31.7) | 0.99 |
| Bivalirudin | 79/139 (56.8) | 65/128 (50.8) | 0.32 |
| TIMI flow grade 0/1 on arrival | 120/147 (81.6) | 118/140 (84.3) | 0.55 |
| Thrombus aspiration catheter used | 93/145 (64.1) | 105/140 (75.0) | 0.047 |
| DES | 141/147 (95.9) | 127/140 (90.7) | 0.08 |
| Stents per patient | 3 (2-4) | 1 (1-2) | <0.0001 |
| Total procedure time, min | 55 (38-74) | 41 (30-55) | <0.0001 |
| Total contrast used, ml | 250 (190-330) | 190 (150-250) | <0.0001 |
| Beta-blocker | 137/147 (93.2) | 126/136 (93.3) | 0.96 |
| ACEI/ARB | 142/147 (96.6) | 129/135 (95.6) | 0.65 |
| Statin | 146/146 (100) | 133/135 (98.5) | 0.14 |
| Aldosterone antagonist | 9/147 (6.1) | 8/135 (5.9) | 0.95 |
| Other antianginal agent | 55/147 (37.4) | 49/135 (36.3) | 0.85 |
| Loop diuretic agent | 15/147 (10.2) | 17/135 (12.6) | 0.53 |

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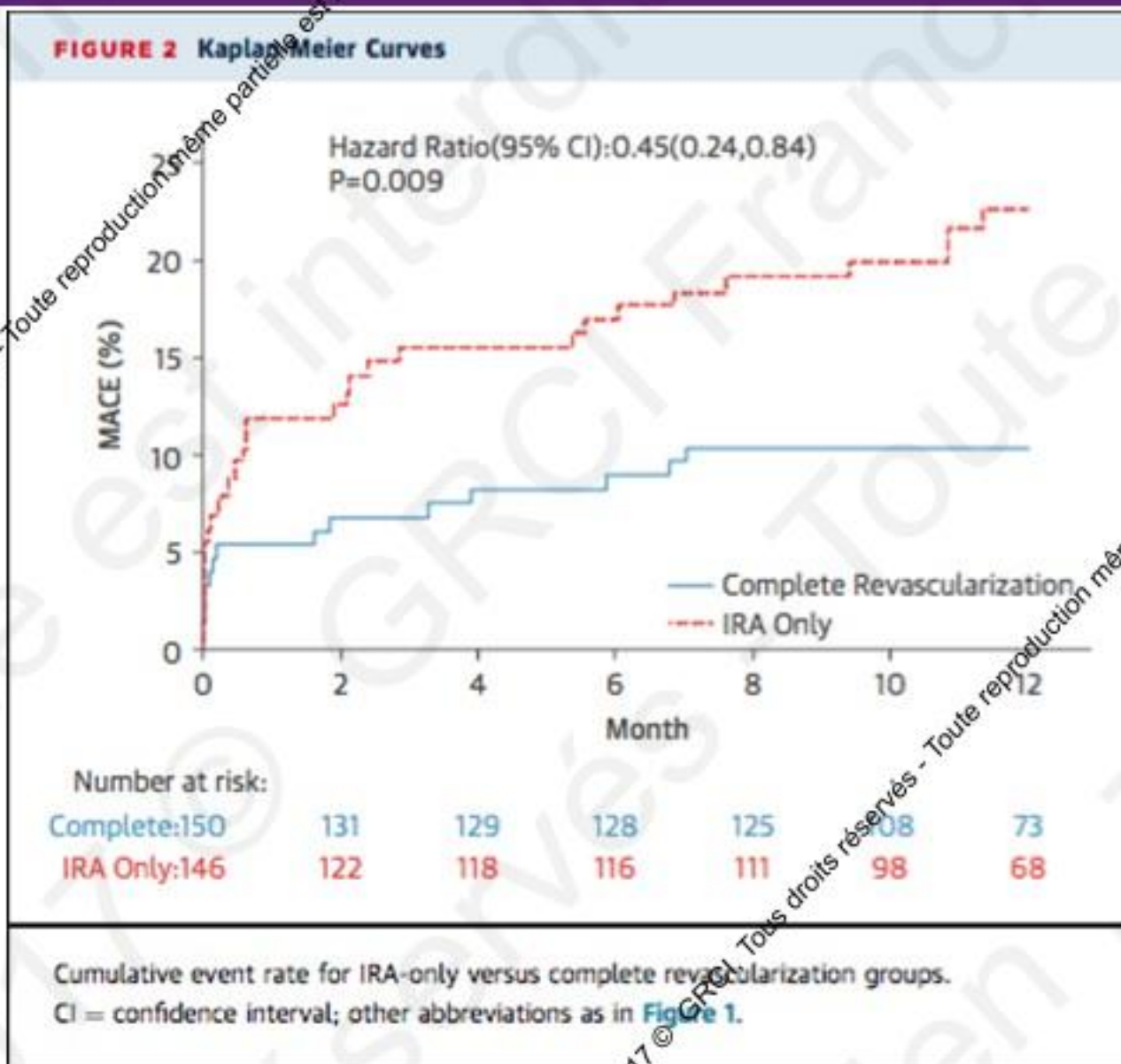


TABLE 3 Clinical Outcomes at 12 Months

| | Complete Revascularization (n = 150) | IRA-Only Revascularization (n = 146) | HR (95% CI) | p Value |
|------------------------------|--|--|------------------|---------|
| Time to first event | | | | |
| MI/CE | 15 (10.0) | 31 (21.2) | 0.45 (0.24-0.84) | 0.009 |
| All-cause mortality | 2 (1.3) | 6 (4.1) | 0.32 (0.06-1.60) | 0.14 |
| Recurrent MI | 2 (1.3) | 4 (2.7) | 0.48 (0.09-2.62) | 0.39 |
| HF* | 4 (2.7) | 9 (6.2) | 0.43 (0.13-1.39) | 0.14 |
| Repeat revascularization | 7 (4.7) | 12 (8.2) | 0.55 (0.22-1.39) | 0.20 |
| All events | | | | |
| All-cause mortality | 4 (2.7) | 10 (6.9) | 0.38 (0.12-1.20) | 0.09 |
| Recurrent MI | 2 (1.3) | 4 (2.7) | 0.47 (0.09-2.59) | 0.38 |
| Type 1 | 0 | 2 | | |
| Type 4b | 2 | 2 | | |
| HF | 5 (3.3) | 10 (6.9) | 0.47 (0.16-1.38) | 0.16 |
| Inpatient | 3 | 7 | | 0.56 |
| Post-discharge | 2 | 3 | | |
| Repeat revascularization | 8 (5.3) | 16 (11.0) | 0.46 (0.20-1.08) | 0.07 |
| Safety | | | | |
| CV mortality | 2 (1.3) | 7 (4.8) | 0.27 (0.06-1.32) | 0.11 |
| Stroke | 2 (1.3) | 2 (1.4) | 0.95 (0.13-6.77) | 0.96 |
| Major bleed | 4 (2.7) | 7 (4.8) | 0.55 (0.16-1.87) | 0.34 |
| Contrast-induced nephropathy | 2 (1.4) | 2 (1.4) | 0.94 (0.13-6.75) | 0.95 |

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Groupe revascularisation complète:

1. Sténose > 70% évaluation angiographique
2. Risque de surestimation: spasme en phase aigue.
3. Revascularisation sans preuve d'ischémie
4. Aucune réduction en termes de décès ni d'IDM.
5. Plus de stents, temps de procédures prolongé et plus de produit contraste.

Groupe artère coupable seule

1. Des sténoses angiographiquement significatives ne sont pas traitées.
2. Plus de revascularisation et donc plus de MACCE?

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ORIGINAL ARTICLE

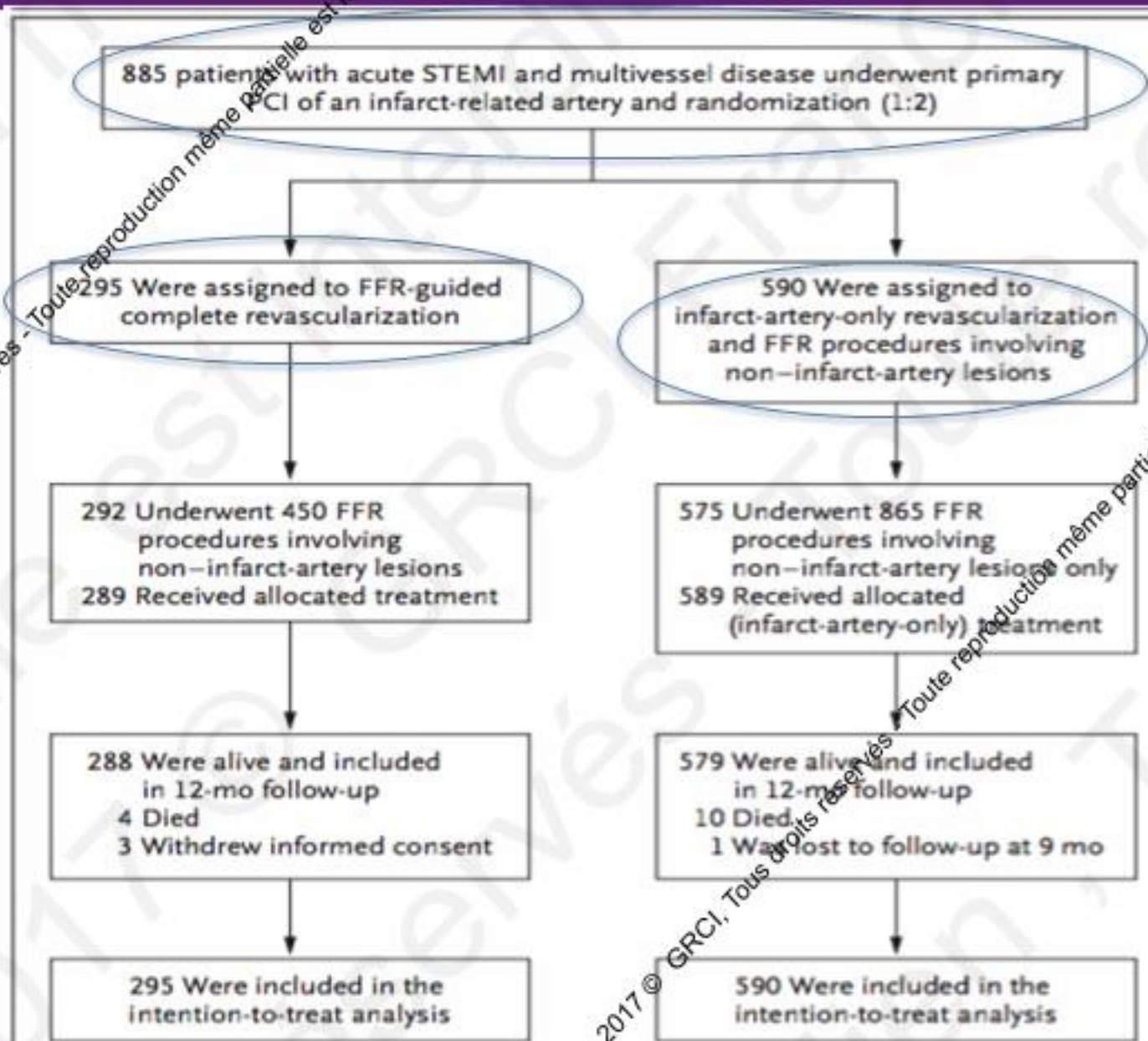
Fractional Flow Reserve–Guided Multivessel Angioplasty in Myocardial Infarction

Pieter C. Smits, M.D., Ph.D., Mohamed Abdel-Wahab, M.D., Franz-Josef Neumann, M.D., Bianca M. Boxma-de Klerk, Ph.D., Ketil Lunde, M.D., Carl E. Schotborgh, M.D., Zsolt Piroth, M.D., David Horak, M.D., Adrian Wlodarczyk, M.D., Paul J. Ong, M.D., Rainer Hambrecht, M.D., Oskar Angerås, M.D., Gert Richardt, M.D., Ph.D., and Elmir Omerovic, M.D., for the Compare-Acute Investigators*

Engl J Med 2017;376:1234-44.

DOI: 10.1056/NEJMoal701067

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Table 2. Procedural Data.*

| Type of Data | Complete Revascularization (N = 295) | Infarct-Artery-Only Treatment (N = 590) | P Value |
|--|--------------------------------------|---|---------|
| Mean time for index procedure — min | 65±31 | 59±28 | 0.001 |
| Mean volume of contrast material used during index PCI — ml | 224±104 | 202±75 | 0.007 |
| FFR procedure successful — no. (%) | 292 (99.0) | 575 (97.5) | 0.13 |
| Reason for FFR procedure failure — no. (%) | | | |
| Failure to cross lesion | 2 (0.7) | 7 (1.2) | |
| Logistic and technical problems | 1 (0.3) | 3 (0.5) | |
| Patient with asthma | 0 | 2 (0.3) | |
| Unknown | 0 | 3 (0.5) | |
| Patients with lesions — no./total no. (%) | | | |
| FFR ≤0.80 | 158/292 (54.1) | 275/575 (47.8) | 0.08 |
| FFR >0.80 | 134/292 (45.9) | 300/575 (52.2) | |
| Mean FFR value | 0.78±0.12 | 0.79±0.12 | 0.42 |
| Patients with treated (FFR-guided) non–infarct-related coronary artery lesions — no./total no. (%) | 163/295 (55.3)† | NA | |
| During index PCI procedure | 136/163 (83.4) | NA | |
| Delayed during index hospitalization‡ | 27/163 (16.6) | NA | |
| Treatment method — no./total no. (%) | | NA | |
| Drug-eluting stent only | 161/163 (98.8) | NA | |
| Bare-metal stent only | 1/163 (0.6) | NA | |
| Balloon dilation only | 1/163 (0.6) | NA | |
| Mean no. of stents used per patient | 1.6±0.9 | NA | |
| Dimensions of stents — mm | | NA | |
| Mean length | 34.3±21.0 | NA | |
| Mean diameter | 2.9±0.4 | NA | |
| Length of hospital stay — days | | | 0.36 |
| Median | 4 | 4 | |
| Range | 1–71 | 1–71 | |
| Patients receiving pre-discharge noninvasive stress tests — no./total no. (%) | 21/294 (7.1) | 71/590 (12.0) | 0.03 |

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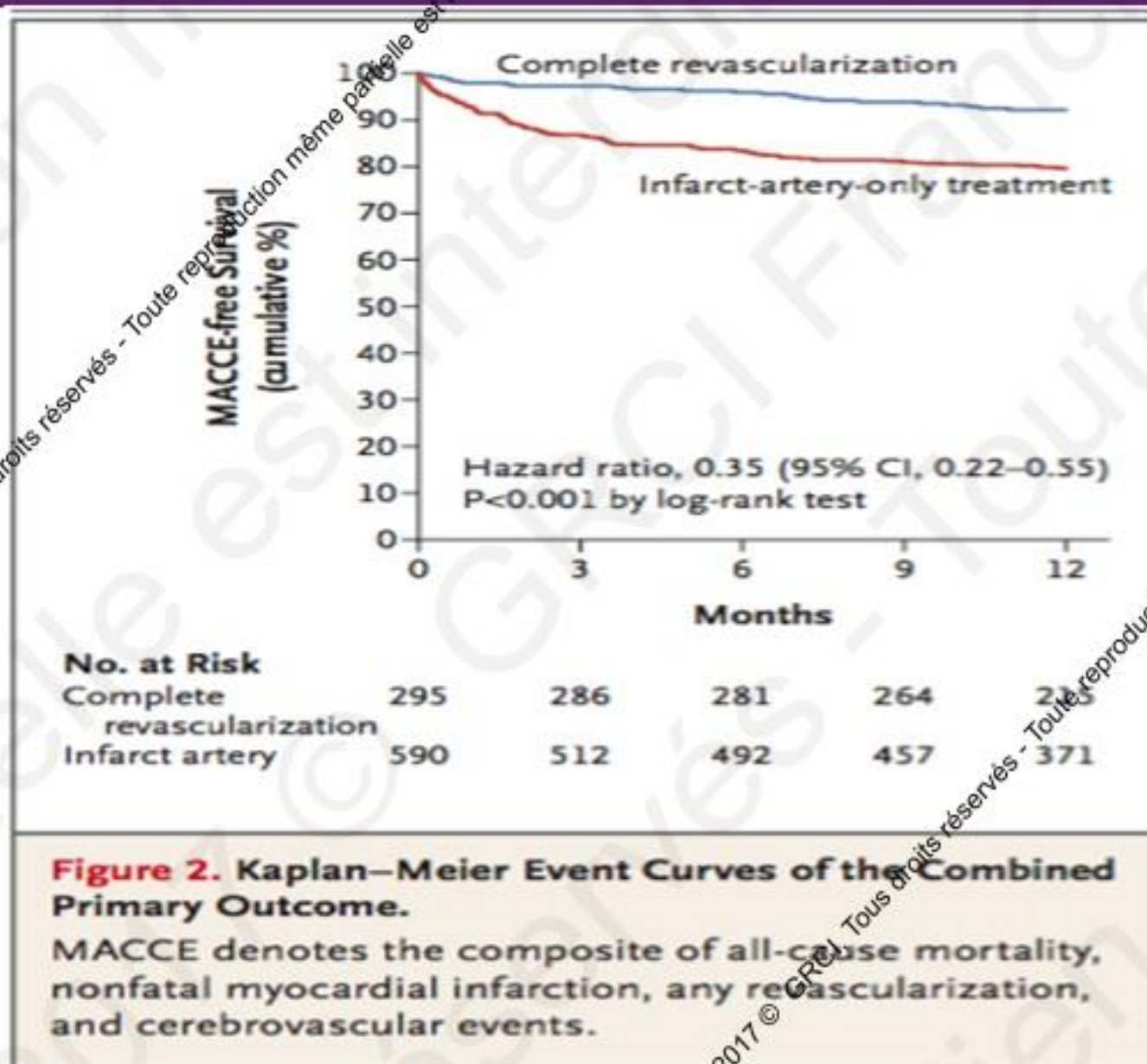


Table 3. Prespecified Clinical End Points at 1 Year.

| End Point | Complete Revascularization (N=295) <i>number (percent)</i> | Infarct-Artery-Only Treatment (N=590) <i>number (percent)</i> | Hazard Ratio (95% CI) | P Value |
|---|---|--|-----------------------|---------|
| Primary | | | | |
| MACCE* | 23 (7.8) | 121 (20.5) | 0.35 (0.22–0.55) | <0.001 |
| Death from any cause | 4 (1.4) | 10 (1.7) | 0.80 (0.25–2.56) | 0.70 |
| Cardiac event | 3 (1.0) | 6 (1.0) | 1.00 (0.25–4.01) | 1.00 |
| Myocardial infarction | 7 (2.4) | 28 (4.7) | 0.50 (0.22–1.13) | 0.10 |
| Spontaneous event | 5 (1.7) | 17 (2.9) | 0.59 (0.22–1.59) | 0.29 |
| Periprocedural event | 2 (0.7) | 11 (1.9) | 0.36 (0.08–1.69) | 0.19 |
| Revascularization | 18 (6.1) | 103 (17.5) | 0.32 (0.20–0.54) | <0.001 |
| PCI | 15 (5.1) | 98 (16.6) | 0.37 (0.24–0.57) | <0.001 |
| Coronary-artery bypass-graft | 3 (1.0) | 5 (0.8) | 1.20 (0.29–5.02) | 0.80 |
| Cerebrovascular event | 0 | 4 (0.7) | NA | NA |
| Secondary | | | | |
| NACE (any first event) | 25 (8.5) | 174 (29.5) | 0.25 (0.16–0.38) | <0.001 |
| Death from any cause) or myocardial infarction | 11 (3.7) | 38 (6.4) | 0.57 (0.29–1.12) | 0.10 |
| Major bleeding | 3 (1.0) | 8 (1.4) | 0.75 (0.20–2.84) | 0.67 |
| Any bleeding | | | | |
| At 12 mo | 9 (3.1) | 28 (4.7) | 0.64 (0.30–1.36) | 0.25 |
| At 48 hr | 5 (1.7) | 8 (1.4) | 1.25 (0.41–3.83) | 0.69 |
| Hospitalization for heart failure, unstable angina, or chest pain | 13 (4.4) | 47 (8.0) | 0.54 (0.29–0.99) | 0.04 |
| Any revascularization† | 19 (6.4) | 161 (27.3) | 0.47 (0.29–0.76) | 0.002 |
| Stent thrombosis | 2 (0.7) | 1 (0.2) | 0.58 (0.12–2.80) | 0.50 |

Groupe revascularisation complète:

1. 50% des lésions jugées angiographiquement significatives ne l'étaient plus.
2. Plus de produit de contrast
3. Temps de procédure prolongée
4. Quelle est la valeur de le FFR en phase aigue d'infarctus?

Groupe artère coupable seule:

1. La moitié des sténoses hémodynamiquement significatives n'ont pas été traitée.
2. Surveillance par test d'ischémie non invasif
3. Le % élevé des MACCE ne serait il pas du à une évolution naturelle de la maladie?

Complete revascularisation versus treatment of the culprit lesion only in patients with ST-segment elevation myocardial infarction and multivessel disease (DANAMI-3—PRIMULTI): an open-label, randomised controlled trial

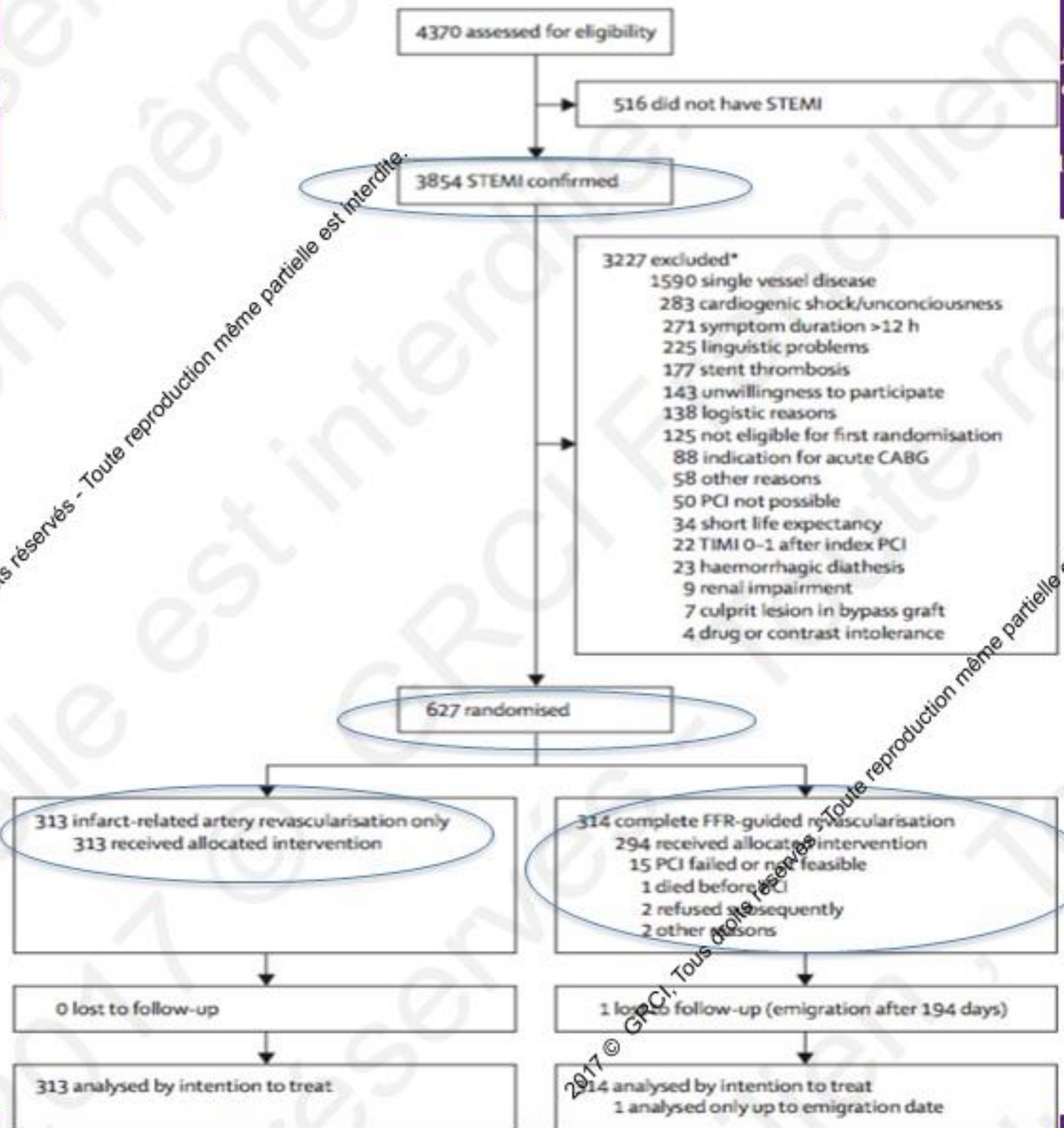
*Thomas Engström, Henning Kelbæk, Steffen Helqvist, Dan Eik Høfsten, Lene Kløvgaard, Lene Holmvang, Erik Jørgensen, Frans Pedersen, Kari Saunamäki, Peter Clemmensen, Ole De Backer, Jan Ravkilde, Hans-Henrik Tilsted, Anton Boel Villadsen, Jens Aarøe, Søren Eggert Jensen, Bent Raunsgaard, Lars Køber, for the DANAMI-3—PRIMULTI Investigators**

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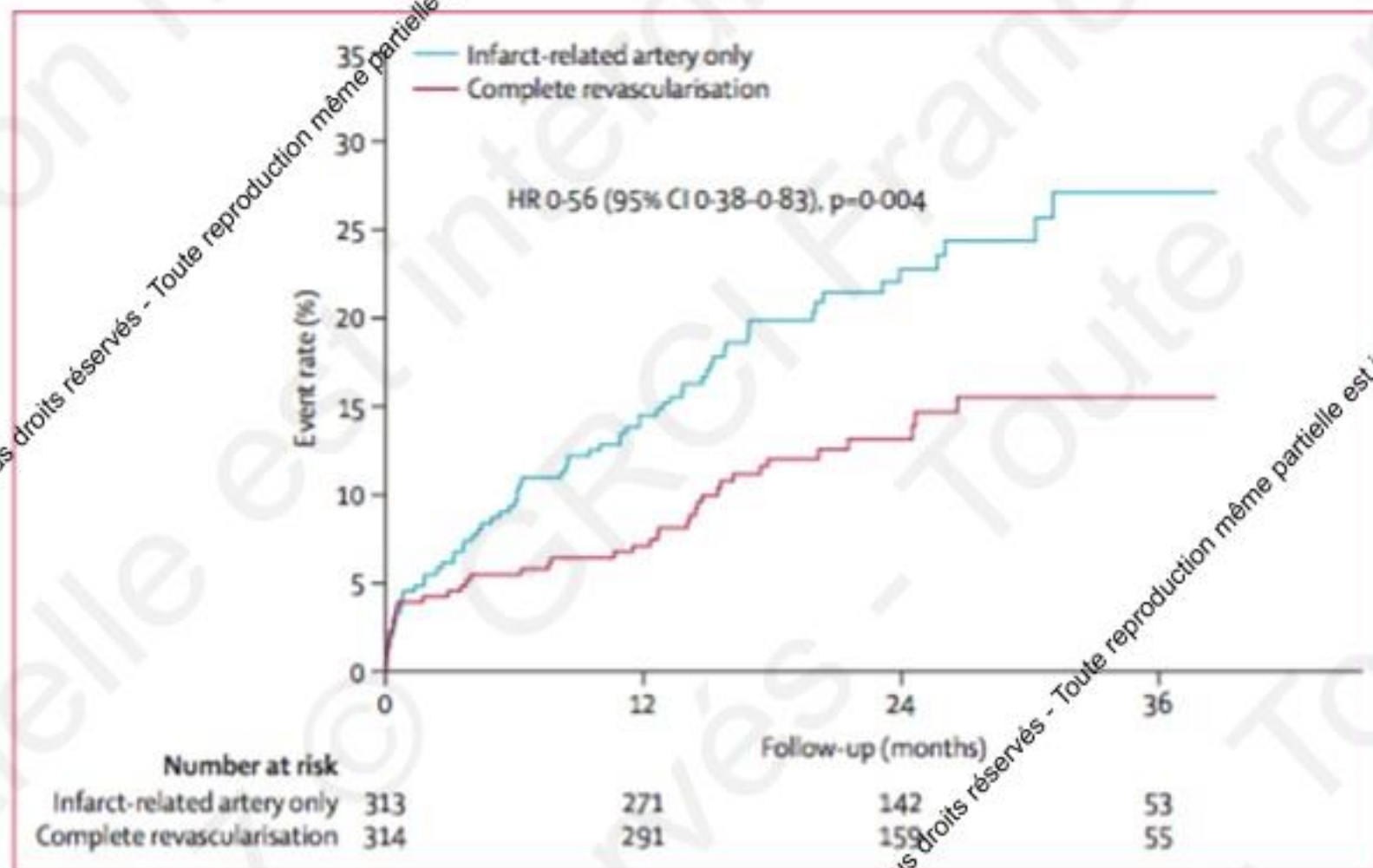


Figure 2: Event rates of the combined primary endpoint

Follow-up was for 44 months after primary percutaneous coronary intervention. HR=hazard ratio.

| | Infarct-related artery only (n=313) | Complete revascularisation (n=314) | Hazard ratio (95% CI) | p |
|--|-------------------------------------|------------------------------------|-----------------------|---------|
| Primary endpoint* | 68 (22%) | 40 (13%) | 0.56 (0.38-0.83) | 0.004 |
| All-cause mortality | 11 (4%) | 15 (5%) | 1.40 (0.63-3.00) | 0.43 |
| Non-fatal reinfarction | 16 (5%) | 15 (5%) | 0.94 (0.47-1.90) | 0.87 |
| Ischaemia-driven revascularisation | 52 (17%) | 17 (5%) | 0.31 (0.18-0.53) | <0.0001 |
| Secondary endpoints | | | | |
| Cardiac death | 9 (3%) | 5 (2%) | 0.56 (0.19-1.70) | 0.34 |
| Cardiac death or non-fatal myocardial infarction | 25 (8%) | 20 (6%) | 0.80 (0.45-1.45) | 0.47 |
| Urgent percutaneous coronary intervention | 18 (6%) | 7 (2%)† | 0.38 (0.16-0.90) | 0.03 |
| Non-urgent percutaneous coronary intervention | 27 (9%) | 8 (3%) | 0.29 (0.13-0.63) | 0.002 |
| Unplanned coronary-artery bypass graft surgery | 7 (2%) | 3 (1%) | 0.43 (0.11-1.70) | 0.22 |

Data are number of events (%). *The first event per patient is listed. †One patient had both urgent and non-urgent percutaneous coronary intervention.

Table 3: Clinical outcomes

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REVIEW TOPIC OF THE WEEK

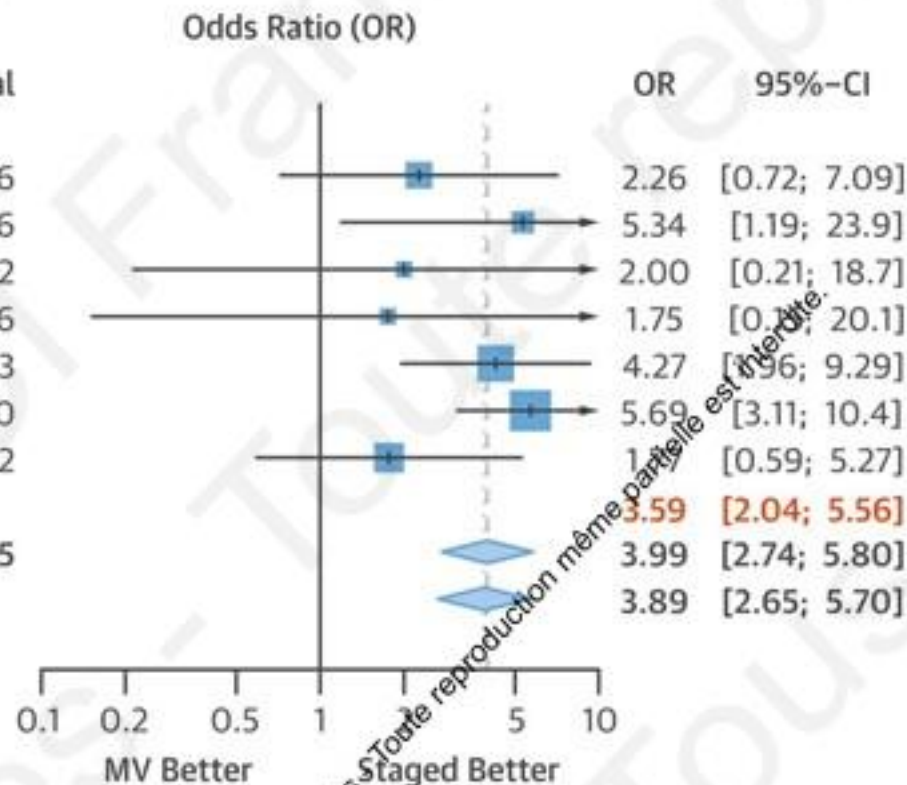
PCI Strategies in Patients With ST-Segment Elevation Myocardial Infarction and Multivessel Coronary Artery Disease

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| Study | MULTIVESSEL | | STAGED | |
|---|-------------|-------|--------|-------|
| | Events | Total | Events | Total |
| Corpus (2004) | 5 | 26 | 12 | 126 |
| Varani (2008) | 15 | 147 | 2 | 96 |
| Mohamad (2011) | 2 | 7 | 2 | 12 |
| Maamoun (2013) | 2 | 42 | 1 | 36 |
| Kornowski (2011) | 25 | 275 | 9 | 393 |
| Jensen (2012) | 36 | 354 | 16 | 820 |
| Kim (2014) | 5 | 67 | 11 | 252 |
| Bayesian hierarchical meta-analysis | | | | |
| Fixed effect model | 90 | 918 | 53 | 1735 |
| Random effects model | | | | |
| <i>Heterogeneity: I-squared=0%, tau-squared=0, p=0.4953</i> | | | | |



Eric R. Bates et al. JACC 2016;68:1066-1081

Revascularisation complète: avantages

- Plus de myocarde sauvé, amélioration de la FEVG
- Moins de ponctions artérielles
- Durée d'hospitalisation raccourcie
- Coût moindre
- Moins de revascularisations ultérieures

Inconvénients

- Plus de volume de produit de contraste
- Durée de procédure prolongée
- Surestimation du degré de sténose du fait des phénomènes spastiques.



ESC

European Society
of Cardiology

European Heart Journal (2017) **00**, 1–66
doi:10.1093/eurheartj/ehx393

ESC GUIDELINES

2017 ESC Guidelines for the management of acute myocardial infarction in patients presenting with ST-segment elevation

Non-IRA strategy

Routine revascularization of non-IRA lesions should be considered in STEMI patients with multivessel disease before hospital discharge. ^{167–173}

Non-IRA PCI during the index procedure should be considered in patients with cardiogenic shock.

Ia

A

Ia

C

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Table. Summary of Prior and Updated Recommendations on PCI of a Nonculprit Vessel and Aspiration Thrombectomy in Patients With STEMI Undergoing Primary PCI^a

| 2011 ACCF/AHA/SCAI Guideline on PCI and 2013 ACCF/AHA Guideline on STEMI Recommendations | 2015 ACC/AHA/SCAI Focused Update on Primary PCI Recommendations | Modifications |
|---|--|--|
| <ul style="list-style-type: none"> • PCI should not be performed in a non-infarct artery at the time of primary PCI in patients with STEMI who are hemodynamically stable (class III—harm; LOE: B) | <ul style="list-style-type: none"> • PCI of a non-infarct artery may be considered in selected patients with STEMI and multivessel disease who are hemodynamically stable, either at the time of primary PCI or as a planned staged procedure (class IIb; LOE: B-R) | <ul style="list-style-type: none"> • PCI of a nonculprit artery upgraded from class III—harm to class IIb • New recommendation now specifically addresses PCI of a nonculprit artery either at the time of primary PCI or as a staged procedure |
| <ul style="list-style-type: none"> • Manual aspiration thrombectomy is reasonable for patients undergoing primary PCI (class IIa; LOE: B) | <ul style="list-style-type: none"> • Routine aspiration thrombectomy before primary PCI is not useful (class III—no benefit; LOE: A) • The usefulness of selective and bailout aspiration thrombectomy in patients undergoing primary PCI is not well established (class IIb; LOE: C-LD) | <ul style="list-style-type: none"> • Use of manual aspiration thrombectomy downgraded • Routine use of manual aspiration thrombectomy is now not recommended • Selective and bailout usefulness of manual aspiration thrombectomy now categorized as not well established |

Abbreviations: ACC, American College of Cardiology; ACCF, American College of Cardiology Foundation; AHA, American Heart Association; B-R, moderate-quality randomized data; C-LD, based on limited data; LOE, Level of Evidence; PCI, percutaneous coronary intervention; SCAI, Society for Cardiac Angiography and Intervention; STEMI, ST-elevation myocardial infarction.

^a Adapted with permission of the ACCF, the AHA, and SCAI.

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Conclusion

1. Doit on tout revasculariser? Oui
2. La stratégie agressive est mieux que la stratégie conservatrice.
3. Doit on tout revasculariser par une angioplastie multiple immédiate ou différée? Résultats mitigés
4. Nécessité de larges essais qui comparent la revascularisation complète immédiate vs différée
5. Patients en choc cardiogénique: revascularisation complète immédiate.