

## SUPPLEMENTARY MATERIAL

### Table of the supplementary material

#### Description of the ESC ACCA QI Domains for AMI

Domain of care	Type of QI	Description	Components/eligibility
<b>1. Center organization</b>	1.1 Main	Center is part of a network organization.	Single emergency telephone number, prehospital ECG, prehospital activation of the catheterization laboratory.
	1.2 Secondary 1	Center routinely assesses relevant times for the reperfusion process in STEMI patients.	Times from "call to FMC", "FMC to door", "door to arterial access", and "door-in-door-out" for centers without on-site catheterization laboratory.
	1.3 Secondary 2	Center participates in a regular program for quality assessment.	
<b>2. Reperfusion-invasive strategy</b>	2.1 Main (STEMI 1)	Proportion of eligible STEMI patients reperfused.	Symptom onset to diagnosis < 12 h.
	2.2 Main (STEMI 2)	Proportion of eligible STEMI patients with timely reperfusion.	For fibrinolysis: < 30 min from FMC to needle. For primary PCI and admission to PCI-capable centers: < 60 min from door to arterial access. For transferred patients: door-in door-out time < 30 min.
	2.3 Main NSTEMI	Proportion of high-intermediate-risk NSTEMI patients receiving coronary angiography within 72 h of admission.	High-intermediate risk: at least one of diabetes mellitus, renal dysfunction (eGFR < 30 mL/min/1.73 m <sup>2</sup> ), LVEF ≤ 0.40, heart failure, recent PCI, prior CABG, GRACE risk score > 140, recurrent symptoms, or ischemia on noninvasive testing.
	2.3 Secondary (STEMI)	Time between FMC and arterial access for primary PCI.	
<b>3. Inhospital risk assessment</b>	3.1 Main (1)	Proportion of NSTEMI patients with GRACE risk score assessment.	GRACE risk score numerical value assessed and recorded in the discharge letter.
	3.2 Main (2)	Proportion of AMI patients with CRUSADE bleeding score assessment.	CRUSADE bleeding score numerical value assessed and recorded in the discharge letter.
	3.3 Main (3)	Proportion of AMI patients with LVEF assessment.	LVEF numerical value assessed and recorded in the report of the last echocardiography during hospital stay.
<b>4. Antithrombotics during hospitalization</b>	4.1 Main (1)	Proportion of patients with "adequate P2Y12 inhibition" on discharge.	For ticagrelor: AMI patients without previous hemorrhagic stroke, high bleeding risk, fibrinolysis, or oral anticoagulation; prasugrel was not prescribed. For clopidogrel: no indication for prasugrel or ticagrelor and without high bleeding risk.
	4.2 Main (2)	Proportion of patients with NSTEMI treated with fondaparinux.	Exclusion of candidates for immediate (≤ 2 h) invasive strategy or with eGFR < 20 mL/min.

	4.3 Secondary	Proportion of eligible patients discharged on dual antiplatelet therapy.	Eligible: patients with CRUSADE risk score < 50 and without oral anticoagulation on discharge.
<b>5. Secondary prevention-discharge treatment</b>	5.1 Main	Proportion of patients with AMI discharged on high-intensity statins.	Atorvastatin $\geq$ 40 mg or rosuvastatin $\geq$ 20 mg.
	5.2 Secondary (1)	Proportion of patients with AMI and clinical evidence of HF/LVEF $\leq$ 0.40 discharged on ACEIs/ARBs.	Contraindications: systolic blood pressure of less than 100 mmHg or severe renal failure (eGFR $<$ 30 mL/min).
	5.3 Secondary (2)	Proportion of patients with AMI and clinical evidence of HF/LVEF $\leq$ 0.40 discharged on beta-blockers.	Contraindications: systolic blood pressure of less than 100 mmHg at discharge, asthma, and second- or third-degree atrioventricular block.
<b>6. Patient satisfaction</b>	6.1 Main	Feedback systematically collected on patient's experience.	Recommendation to attend a cardiac rehabilitation program used as surrogate.
<b>7. Composite and outcome QI</b>	7.1 Main composite QI	Opportunity-based composite QI.	Center is part of a network organization, STEMI patients reperfused, coronary angiography in high ischemic risk AMI patients, GRACE in NSTEMI, CRUSADE in AMI patients, LVEF before discharge, low-dose aspirin, adequate P2Y <sub>12</sub> inhibition, ACEIs/ARBs in patients with HF/LVEF $\leq$ 0.40, beta-blockers in HF/LVEF $\leq$ 0.40, high-intensity statins, cardiac rehabilitation referral.
	7.2 Secondary composite QI	All-or-none composite QI based on 3 or 5 components, according to LVEF.	For patients without HF/with LVEF $>$ 0.40: low-dose aspirin, P2Y <sub>12</sub> inhibitor, high-intensity statins. For patients with HF/with LVEF $\leq$ 0.40: low-dose aspirin, P2Y <sub>12</sub> inhibitor, high-intensity statins, ACEIs/ARBs, beta-blockers.
	7.3 Secondary outcome	30-day mortality rate adjusted for the GRACE 2.0 risk score.	No information on follow-up was available for 29 patients and GRACE 2.0 risk score could not be calculated for 19 patients.

ACEIs/ARBs, angiotensin-converting enzyme inhibitors/angiotensin receptor blockers; AMI, acute myocardial infarction; CABG, coronary artery bypass surgery; ECG, electrocardiogram; eGFR, estimated glomerular filtration rate; FMC, first medical contact; HF, heart failure; LVEF, left ventricular ejection fraction; NSTEMI, non-ST-segment elevation acute myocardial infarction; PCI, percutaneous coronary intervention; QI, quality indicator; STEMI, ST-segment elevation myocardial infarction.