

Table 1: Patients demographics, cardiovascular risk factors, clinical status at recruitment, procedural characteristics and CMR parameters at 1 week and 6 months after STEMI

	Total (N=191)	Metoprolol (N=97)	Control (N=94)	p-value
Demographics				
Age (years)	57.9±11.2	57.4±12.2	58.4±10.2	0.539
Sex (male)	168 (88)	83 (88)	85 (88)	0.887
BMI (kg/m ²)	27.6±3.5	27.6±3.5	27.6±3.6	0.964
Cardiovascular risk factors				
Hypertension	72 (38)	35 (36)	37 (39)	0.680
Diabetes mellitus	39 (20)	21 (22)	18 (19)	0.642
Dyslipidemia	83 (44)	42 (43)	41 (44)	0.985
Smoking*	124 (65)	64 (66)	60 (64)	0.681
Clinical status at recruitment				
Killip class II [†]	19 (10)	8 (8)	11 (12)	0.425
Systolic BP (mmHg)	142±19	142±18	143±20	0.892
Diastolic BP (mmHg)	88±16	90±16	87±16	0.246
Heart rate (bpm)	82±13	82±14	81±13	0.777
Procedural characteristics				
Ischemia duration (min)	194±65	198±63	190±67	0.354
TIMI grade 0-1 flow before primary PCI	158 (83)	77 (79)	81 (86)	0.272
Successful PCI (TIMI grade 2-3 flow)	188 (98)	97 (100)	91 (97)	0.117
CMR parameters at 1 week				

LVEDV (mL)	173.1±36.2	170.8±33.4	175.4±38.9	0.378
LVESV (mL)	98.4±31.4	93.6±26.8	103.3±35.1	0.032
LVEF (%)	44.0±25.5	45.7±9.2	42.3±9.5	0.012
LV mass (g)	111.8±25.5	109.9±25.2	113.8±25.8	0.287
LGE (%)	23.0±12.9	21.1±11.7	25.0±13.8	0.036
MVO	117 (61)	52 (54)	65 (69)	0.034
IMH	81 (42)	36 (37)	45 (48)	0.133
LV GCS (%)	-13.2±3.9	13.9±3.8	12.5±3.9	0.011
CMR parameters at 6 months				
LVEDV (mL)	192.3±43.2	187.4±39.0	197.4±46.8	0.112
LVESV (mL)	105.4±41.3	98.5±36.3	112.5±45.1	0.020
LVEF (%)	46.7±10.9	48.6±10.1	44.7±11.4	0.013
LV mass (g)	85.8±17.8	84.8±17.6	86.9±18.0	0.426
LGE (%)	17.0±9.8	15.8±9.7	18.2±9.8	0.099
Adverse LV remodeling [‡]	52 (27)	21 (22)	31 (33)	0.079
LV GCS (%)	-16.4±4.3	16.9±4.1	15.8±4.4	0.087

BMI, body mass index; BP, blood pressure; CMR, cardiovascular magnetic resonance; GCS, global circumferential strain; IMH, intramyocardial hemorrhage; LGE, late gadolinium enhancement; LV, left ventricular; LVEDV, left ventricular end-diastolic volume; LVEF, left ventricular ejection fraction; LVESV, left ventricular end-systolic volume; MVO, microvascular obstruction; PCI, percutaneous coronary intervention; STEMI, ST-segment elevation myocardial infarction; TIMI, Thrombolysis in Myocardial Infarction.

*smoking was defined as current or quit <10 years ago

†all other patients were Killip class I (Killip class III to IV were study's exclusion criteria)

‡adverse LV remodeling was defined as ≥20% increase in LVEDV at 6 months

Continuous variables are presented as mean \pm standard deviation and categorical variables as frequencies (percentages). Comparisons between the early metoprolol group and the control group were performed using independent samples t-test for continuous variables and Pearson's Chi square test or Fischer's exact test for categorical variables. Fischer's exact test was used when the expected value of a categorical variable was <5 .