

## INTRODUCTION

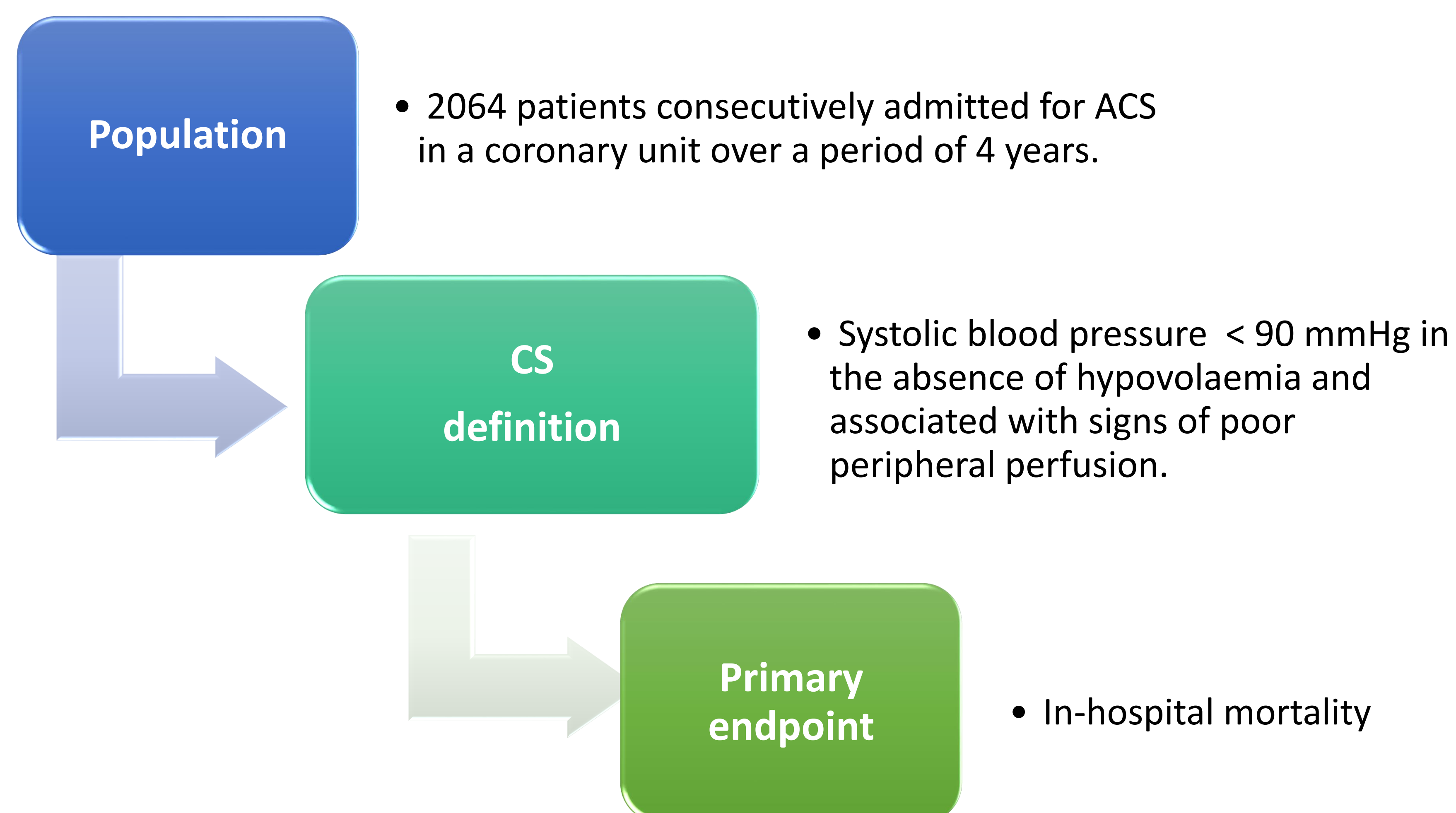
- Cardiogenic shock (CS) remains the most serious clinical complication and the leading cause of death for patients with an acute coronary syndrome (ACS).
- Despite recent studies suggesting possible declines in the risk of dying during hospitalization for patients with CS, which has been linked to advances in medical treatment and coronary revascularization techniques, in-hospital mortality associated with CS remains high.

## AIM

- Determine characteristics and management of patients with an ACS complicated by CS.
- Determine predictors of development of CS during hospitalization and predictors of in-hospital mortality.

## METHODS

### Retrospective study



## RESULTS

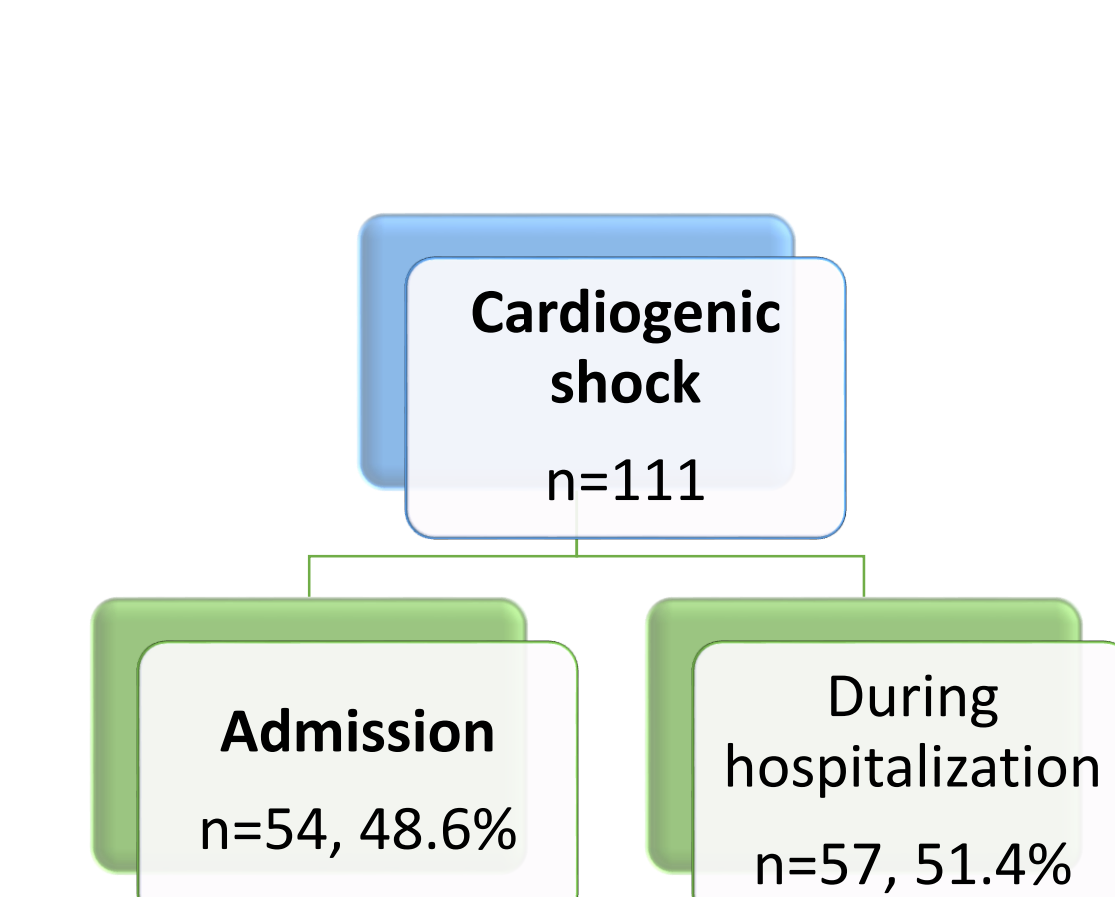
### Cardiogenic shock was present in 111 cases (5.4%)

	CS (n = 111)	Without CS (n = 1953)	p
<b>Demographics</b>			
Age (years, mean ± sd)	69.8 ± 13.2	63.5 ± 13.1	<0.001
Female gender (%)	32.4	22.1	0.01
<b>Medical history (%)</b>			
Arterial hypertension	20.7	29.6	0.04
Diabetes mellitus	25.2	27.8	NS
Dyslipidemia	48.6	56.7	NS
Myocardial infarction	15.3	15.0	NS
<b>Clinical presentation</b>			
STEMI (%)	73.0	48.0	<0.001
Creatinine (mg/dl, mean ± sd)	1.5 ± 0.7	1.1 ± 0.4	<0.001
Hemoglobin (g/dl, mean ± sd)	12.9 ± 2.0	13.9 ± 1.8	<0.001
NT-proBNP (pg/ml, mean ± sd)	8134.6 ± 9920.0	2582.8 ± 5199.6	<0.001
PCR (mg/L, mean ± sd)	42.0 ± 59.4	15.3 ± 29.6	<0.001
FEVE (% mean ± sd)	34.6 ± 11.0	45.9 ± 9.8	<0.001
Multivessel disease (%)	57.4	47.9	0.006

Table 1 - Baseline patients characteristics

(%)	CS (n = 111)	Without CS (n = 1953)	p
Coronary revascularization	71.2	80.7	0.004
Primary angioplasty	71.6	85.5	0.003
Coronary artery bypass surgery	3.8	14.4	0.005
Mechanical ventilation	32.4	2.3	<0.001
Temporary pacemaker	10.8	1.0	<0.001
iECA	54.1	91.1	<0.001
Beta-blockers	39.6	89.1	<0.001
Statins	86.5	98.8	<0.001

Table 2 - In-hospital treatment



	OR (IC95%)	p
STEMI	4.1 (2.0-8.0)	< 0.001
Tachycardia	3.2 (1.6-6.3)	0.001
SBP < 100 mmHg	4.1 (2.1-8.0)	< 0.001
eGFR <60 ml/min/1.73m <sup>2</sup>	2.5 (1.2-5.2)	< 0.001
Killip class 2-3	3.5 (1.8-6.8)	< 0.001

Table 3 - Predictors of occurrence of CS during hospitalization

The in-hospital mortality of patients with CS was 45%, compared with 1.7% in those who did not develop CS.

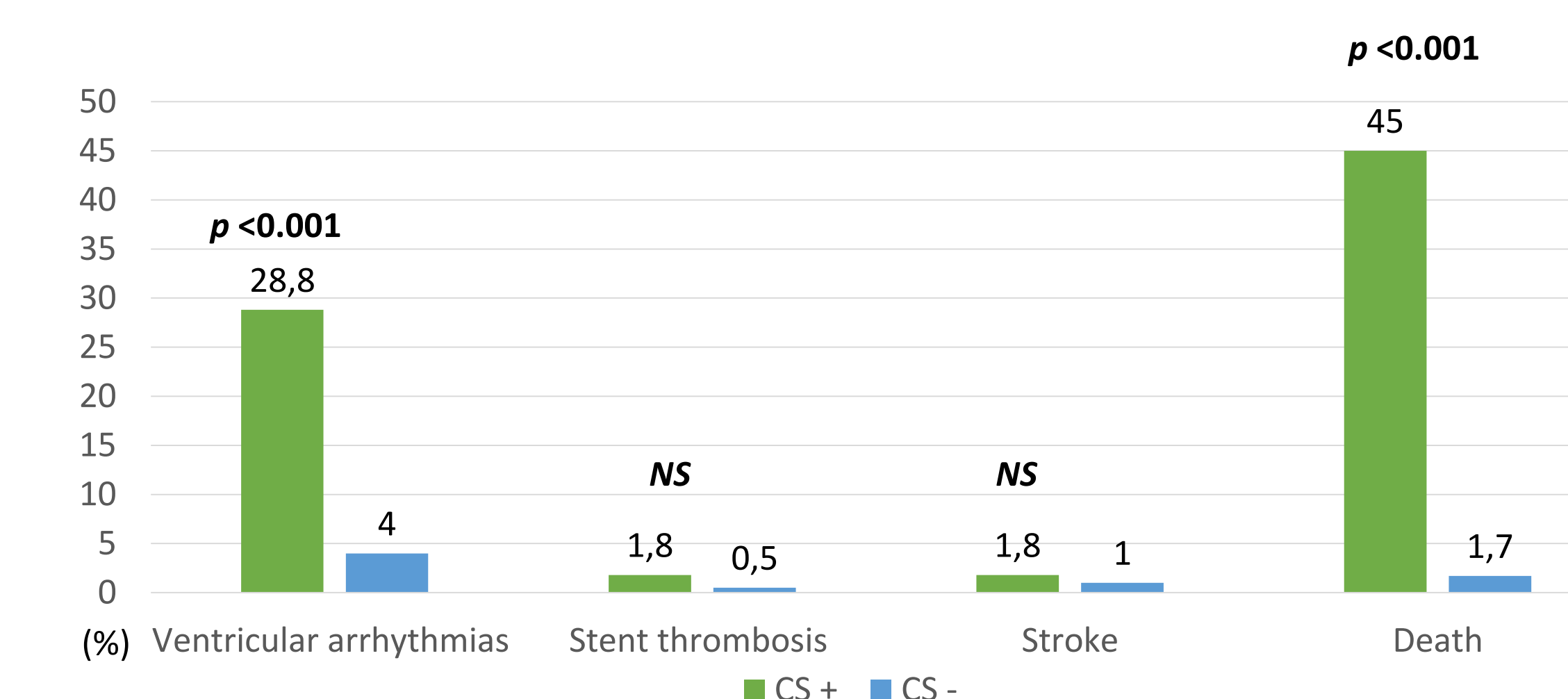


Figure 1 - In-hospital events

	OR (CI95%)	p
Absence of coronary revascularization	4.9 (1.5-16)	0.004
LVEF ≤ 35%	3.9 (1.3-12.4)	0.006
Advanced age	6.4 (1.6-26.2)	0.003
eGFR <60 ml/min/1.73m <sup>2</sup>	4.4 (1.3-15.6)	0.001

Table 4 - Predictors of in-hospital mortality

## CONCLUSION

- According to the literature, our review showed that CS in the context of ACS is associated with a high mortality.
- We identified clinical markers that are associated with the development of CS and may spot patients at risk earlier.
- Absence of coronary revascularization remains an independent predictor of mortality in CS.