

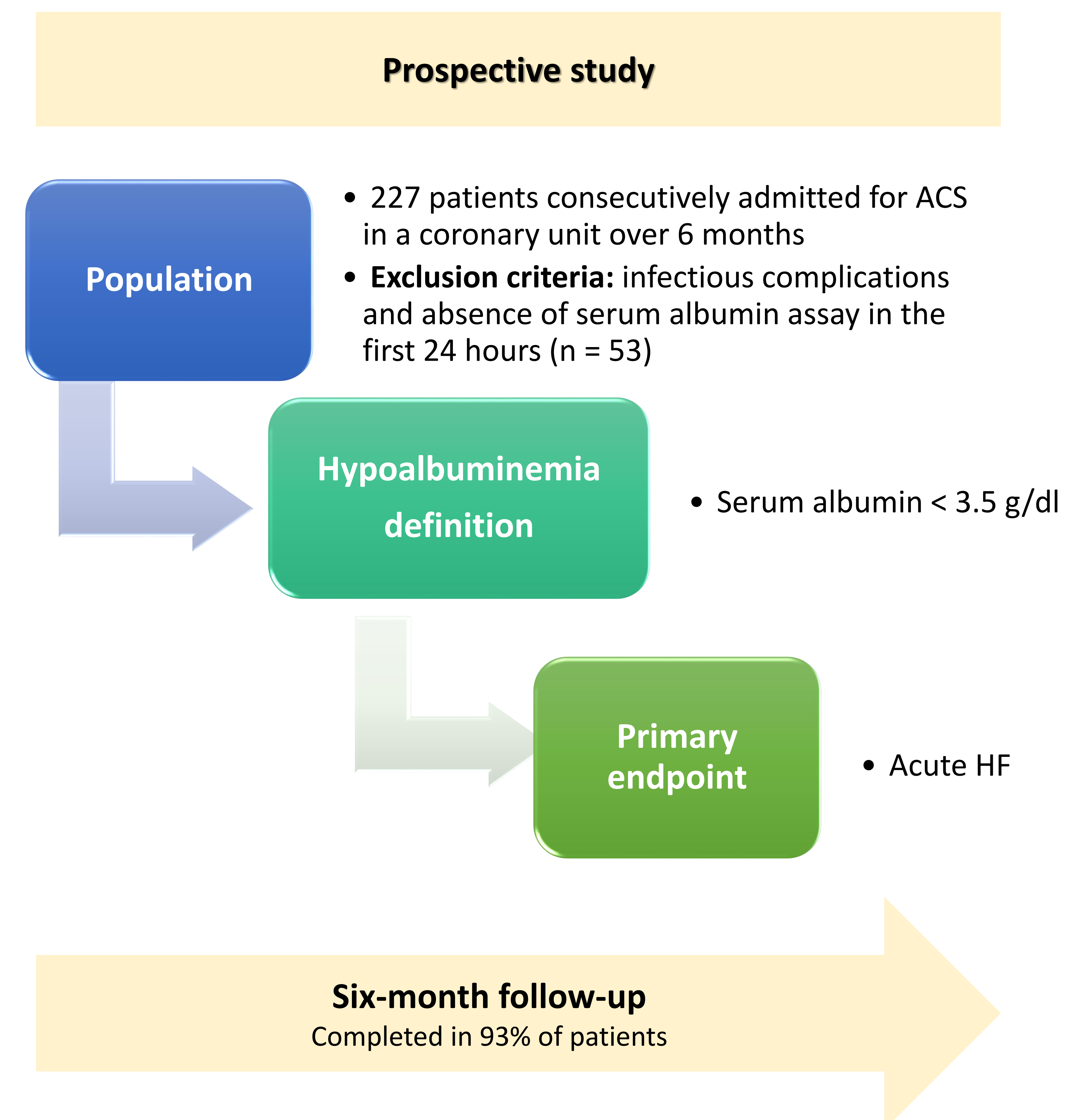
## INTRODUCTION

- Population-based studies have suggested an association between low serum albumin (alb) levels and coronary atherosclerosis and heart failure (HF).
- Low serum albumin is common in patients HF, but the relationship between albumin and HF prognosis has not been well characterized.
- The role of albumin in the context of acute coronary syndromes (ACS) remains unclear, however, seems to associate with an adverse prognosis.

## AIM

To determine whether low serum albumin levels are associated with development of HF in ACS.

## METHODS



## RESULTS

Hypoalbuminemia was present in 75 cases (44.6%)

	Hypoalbuminemia (n = 75) 3.15 ± 0.26 g/dl	Albumin > 3.4 g/dl (n = 93) 3.74 ± 0.33 g/dl	p
<b>Demographics</b>			
Age (years, mean ± sd)	66.13 ± 11.37	58.09 ± 13.85	<0.001
<b>Medical history (%)</b>			
Arterial hypertension	69.3	53.8	0.04
Diabetes mellitus	26.7	16.1	NS
Dyslipidemia	57.3	59.1	NS
Myocardial infarction	9.3	8.6	NS
<b>Clinical presentation</b>			
BMI (kg/m <sup>2</sup> , mean ± sd)	26.1 ± 4.0	27.4 ± 3.9	0.05
Creatinine (mg/dl, mean ± sd)	1.1 ± 0.4	1.0 ± 0.4	NS
eGFR CKG (ml/min, mean ± sd)	81.3 ± 36.8	98.0 ± 44.2	0.01
Hemoglobin (g/dl, mean ± sd)	13.1 ± 1.8	14.3 ± 1.8	<0.001
NT-proBNP (pg/ml, mean ± sd)	3814 ± 5997.3	1748.7 ± 3628.3	0.002
LVEF < 40% (%)	33.8	26.9	NS
Multivessel disease (%)	41.9	45.7	NS
Left main disease (%)	5.4	19.6	0.007

Table 1 - Baseline patients characteristics

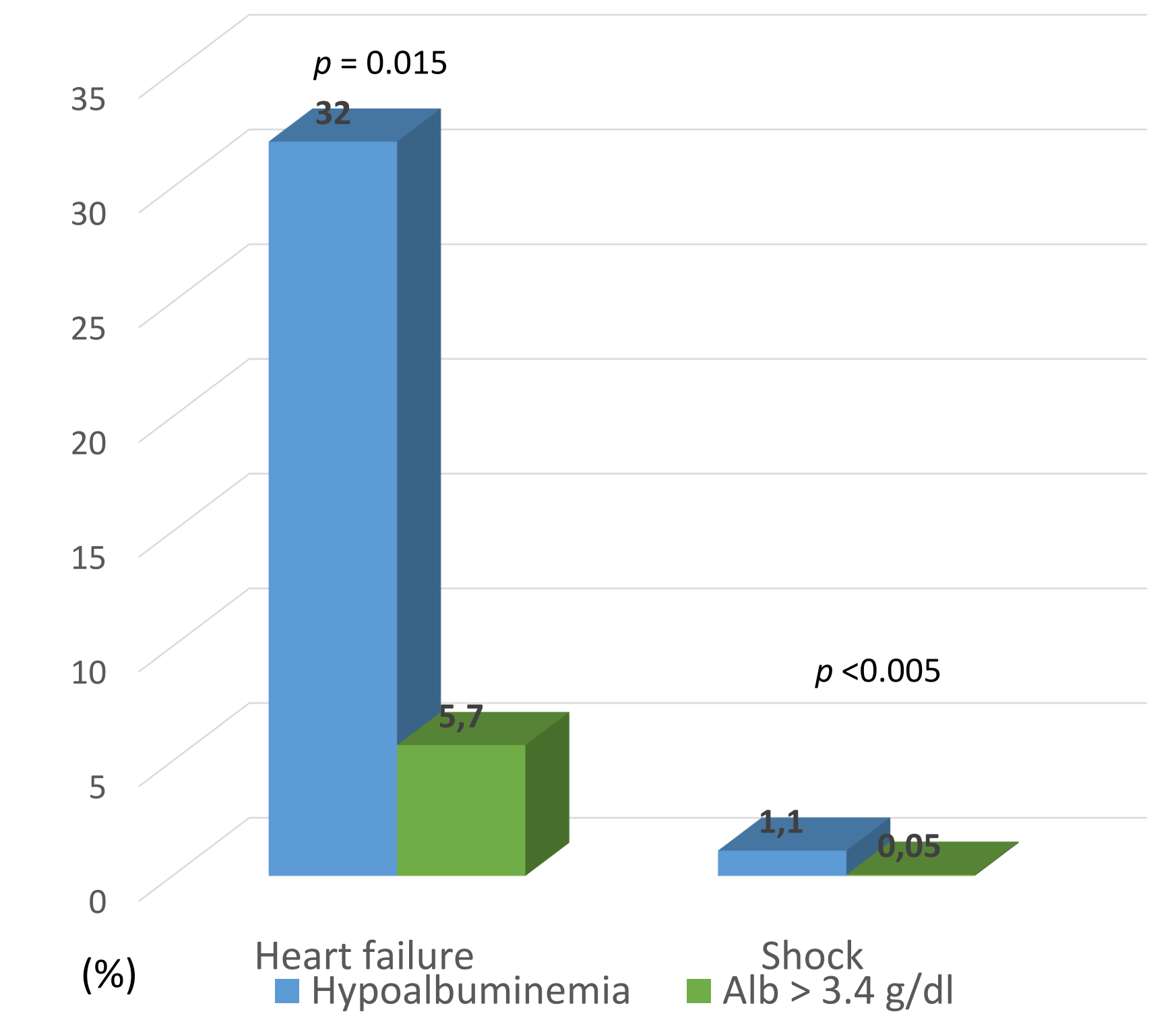


Figure 2 - In-hospital events

Hypoalbuminemia was associated with a higher prevalence of heart failure (OR 2.45 CI95% 1.17-5.10)  
No differences were found in the occurrence of re-infarction, stroke and in-hospital mortality.

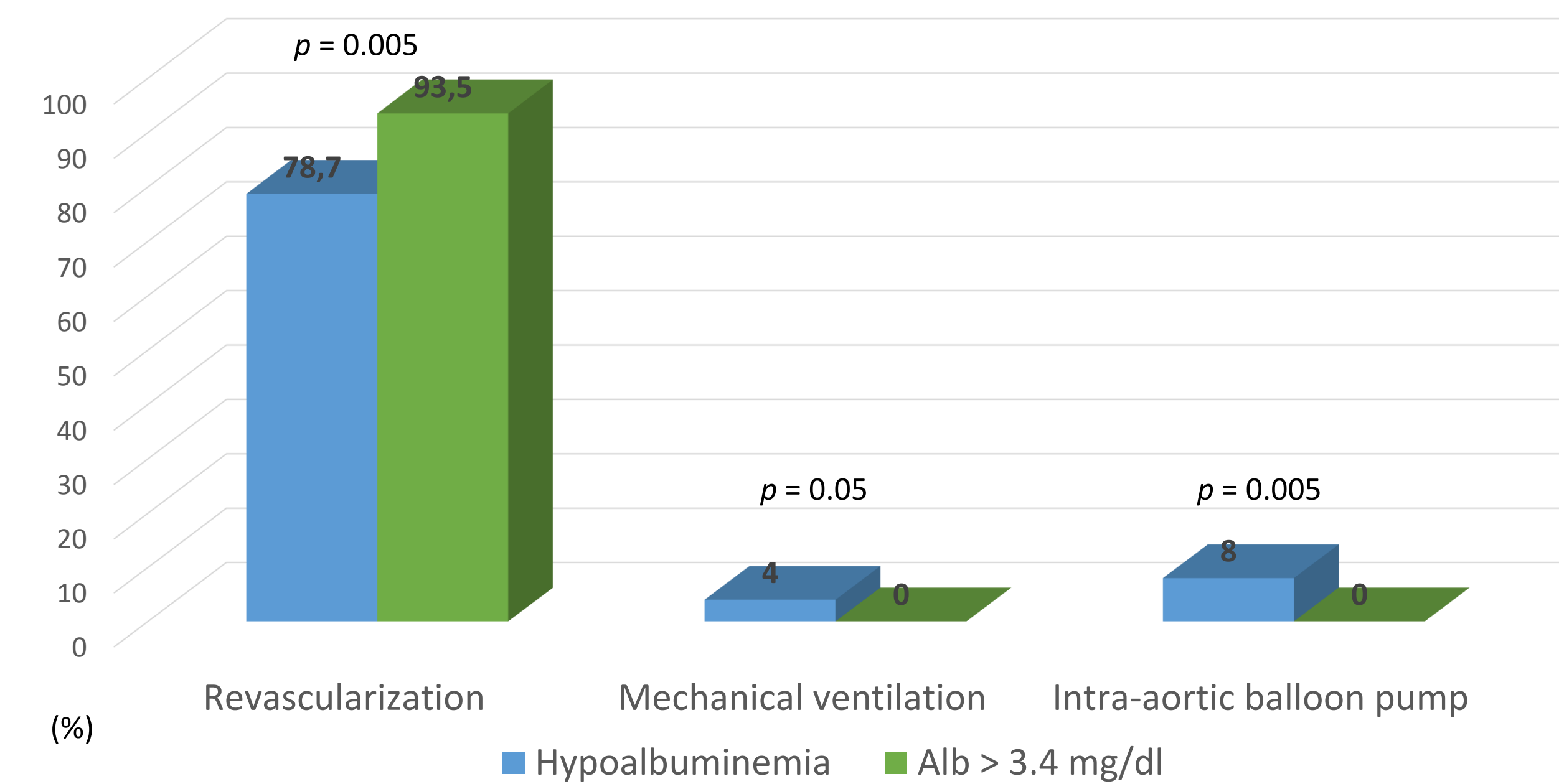


Figure 1 - In-hospital treatment

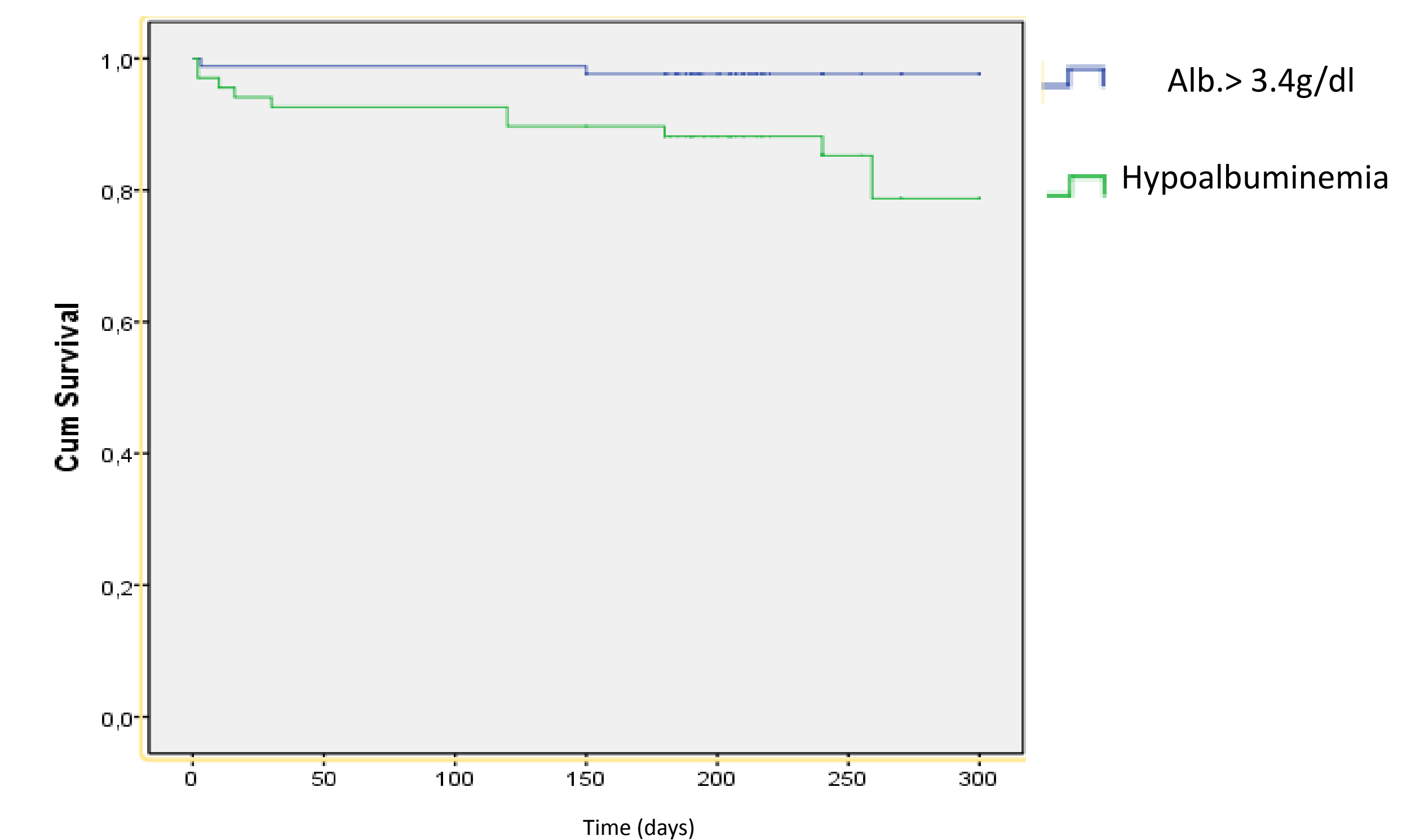


Figure 3 - Survival analysis by Kaplan-Meier survival curves

## CONCLUSION

- The hypoalbuminemia was associated with an increased risk of heart failure during hospitalization and death at 6 months.
- Although the etiology of hypoalbuminemia remains unclear, albumin assay may be useful in risk stratification of acute coronary syndromes.
- Further investigation into mechanisms underlying hypoalbuminemia is warranted.