



segment elevation acute coronary syndrome' (NSTEMI-ACS), we  
the patient based on the available ECGs and troponins.  
Patients with an elevated high sensitive troponin T (hsTropT) from  
other conditions were excluded.

Baseline characteristics were obtained from the clinical records. A  
detailed list of the baseline characteristics can be found in  
[Online Appendix A](#).

## Setting

This study was performed at an academic CCU (Academic Medical  
Center (AMC), University of Amsterdam, The Netherlands). It is a  
large tertiary center with both percutaneous coronary intervention  
(PCI) and on-site cardiac surgery facilities. At the time of the  
registration, the annual coronary artery bypass grafting (CABG)  
(without valve) volume was ~500. The annual PCI volume was ~2000,  
of which ~600 primary PCI.

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ACS study cohort

STEMI

NSTEMI

UA

P value

**Patient characteristics**

**Cardiovascular medical history**



**Figure 1:** Flowchart: route of admission to and discharge from our coronary care unit. All values are reported as numbers (%); ACS: Acute Coronary Syndrome; CCU: Coronary Care Unit; CPU: Chest Pain Unit; ED: Emergency Department; NSTEMI: Non-ST-segment Elevation Myocardial Infarction; STEMI: ST-segment Elevation Myocardial Infarction; UA: Unstable Angina; A) Transported to our CCU by ambulance with an emergency or transport drive after referral from another hospital, of which a considerable proportion was actually transferred directly from home by ambulance using the pre-hospital ECG triage network, with consultation between the ambulance personnel and the referring cardiologist.

patients (65.6%) were less frequently treated with PCI (50.0% (18.2% vs 7.1%, p=0.057). In UA patients with a GRACE score >140 (70.2%, p=0.024) and more frequently with CABG (20.5% vs 3.6%, compared to 140 management strategies were similar. p=0.002). High-risk patients tended to have more of en a prior CABG

	ACS study cohort	STEMI	NSTEMI	UA	P value
Duration of stay on CCU (hours) – median (IQR)	112 (64-160)	112 (64-160)	112 (64-160)	112 (64-160)	0.99
<b>Treatment strategy</b>					
PCI	50.0%	18.2%	7.1%	18.2%	0.057
CABG	20.5%	3.6%	14.0%	20.5%	0.002
CAG	29.5%	78.2%	82.9%	61.3%	0.000
Medical management	20.5%	18.2%	8.9%	10.0%	0.12
Other	0.5%	0.0%	0.0%	0.0%	0.99

**Table 2** In-hospital treatment. ACS: Acute Coronary Syndrome; CABG: Coronary Artery Bypass Grafing; CAG: Coronary Angiography; CCU:



### Stratification by one-year mortality

ACS patients deceased at one year follow-up (group A) were significantly older (74.2 with standard deviation (SD) 9.7 years vs. 62.8 with SD 12.4 years,  $p < 0.001$ ) and more often female (44.7% vs. 29.9%,  $p = 0.036$ ) compared to those alive (group B). Chronic kidney disease (CKD) was more common in group A (54.3% vs. 17.3%,  $p < 0.001$ ) as was a prior stroke (25.5% vs. 8.3%,  $p = 0.001$ ). An invasive strategy (group A 85.1% vs. group B 94.7%,  $p = 0.009$ ) and revascularization (group A 72.3% vs. group B 87.2%,  $p = 0.005$ ) were significantly correlated with higher one-year survival.

In the complete ACS study cohort, female compared to male patients were significantly older and had more often CKD. Furthermore, women and men had similar percentages of CAG, but women less frequently underwent revascularization.

### Discussion

The current unselected ACS population admitted to our academic





