A ONE-YEAR FOLLOW-UP OF PATIENTS WITH ACUTE CORONARY SYNDROME (ACS) AND DIABETES TREATED WITH STATINS: OUTCOMES AND HEALTH CARE COSTS SUPPORTED BY ITALIAN NATIONAL HEALTH SERVICE

Background and Objective
Type 2 Diabetes Mellitus is associated with increased morbidity and mortality in patients with Acute Coronary Syndromes (ACS). The aim of this analysis is to assess, in a community real-world setting, epidemiological and clinical characteristics, 1-year follow-up outcomes and the related economic impact of patients with ACS and Diabetes.

Methods
Starting from ARNO Observatory database (11 million citizens), a record linkage analysis of hospital discharge, disease exemption and prescription records was carried out. A cohort of patients from a subset of 6 Local Health Units (LHUs) with available, complete and good quality data on pharmaceutical prescriptions, specialist/diagnostic procedures and hospitalizations was selected. The accrual period lasted from January 1st to December 31st 2011. Every single patient with ACS and Diabetes was followed up to 1 year from the index date, to identify epidemiological and clinical characteristics, 1-year follow-up outcomes and their costs (drugs in charge to INHS, diagnostic procedures, hospitalizations). Greater attention was focused on patients treated with statins during the 1-year follow-up.

Results
Of 2,989,512 subjects identified, 6,226 patients were hospitalized for ACS; among ACS cases, 1,917 had Diabetes (30.8%) – Fig. 1.

Rate of prescription of statins and related dosage intensity, during the first month after the discharge, are shown in Fig. 2: 69.9% patients with ACS vs 69.1% diabetics with ACS. 63.9% of diabetics with ACS were re-hospitalized (55.6% of them for CV events). Tab. 2 shows the rate and the mean number of re-hospitalizations over the 1-year follow-up.

Prescription Continuity was attributed to all patients who received the correct daily dosage during the 1-year follow-up (with a 20% tolerability). Prescription continuity rate was greater among patients treated with high intensity statins compared to lower intensity ones (67.1% vs 38.9%) – Fig. 3.

Conclusions
Patients with ACS and diabetes have high direct healthcare costs. Re-hospitalizations were the main cost driver. Prescription rate and prescription continuity of statins was sub-optimal. LHUs Authorities together with Cardiologists and General Practitioners should work to bridge the gap between evidence-based recommendations and clinical practice, in order to contain health care costs of patients with Diabetes and ACS.