**Methods:** Data were pooled from 10 trials according to ALI dose (eight trials used 75 mg every 2 weeks [Q2W], with potential dose increase to 150 mg Q2W at Week (W)12 if pre-specified LDL-C goals not achieved at W8 [ALI 75up150 mg]; two trials used 150 mg Q2W only) and stratified by baseline LDL-C.
**Results:** At W24, 28% (378 of 1363 patients) had dose increase from ALI 75 to 150 mg. Absolute reductions in LDL-C associated with ALI were directly proportional to baseline values (Table). For patients with the highest baseline LDL-C values (≥190 mg/dL; ≥4.9 mmol/L), absolute LDL-C reductions at W24 translate to predicted cardiovascular risk reductions (using the CTT model) of 72% (maintained 75 mg), 71% (75up150 mg) and 74% (150 mg throughout). ALI safety profile was similar to comparator (placebo or ezetimibe), except for a higher incidence of injection-site reactions with ALI.
**Conclusions:** Substantial absolute reductions in LDL-C, proportional in size to baseline LDL-C, were observed with both ALI doses.
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### P1513 | BEDSIDE
### Adherence to PCSK9 inhibitors in high cardiovascular risk patients in real-world setting: results from a single-center experience and comparison with statin therapy

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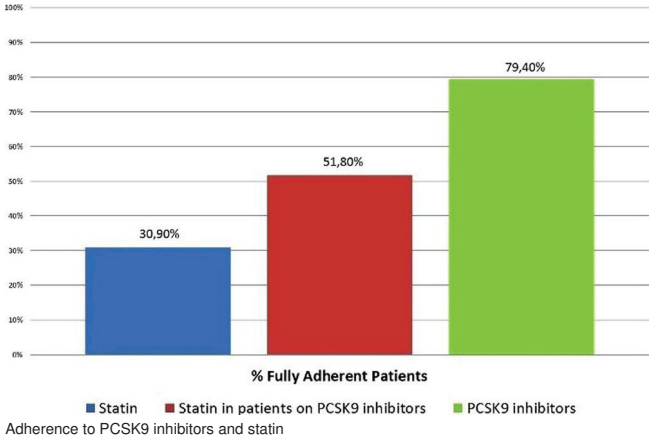
**Background:** In real world setting, there is an unmet need in adherence to statin therapy in high risk patients. Contemporary registries report nonadherence in up to 30–40% of subjects, associated with increased cardiovascular risk. PCSK9 inhibitors have recently proved efficacy in reducing LDL-C level. Considering their different dosing regimen (biweekly or monthly) and low rate of adverse effects, PCSK9 inhibitors may increase patients' adherence to lipid-lowering therapy and reduce discontinuation rate, especially in patients with high pill burden. In literature, data on adherence to PCSK9 inhibitors in "real-world setting" have not been reported.
**Purpose:** To measure level of adherence to PCSK9 inhibitors in high risk "real-world" patients and to compare results with adherence to statin therapy.
**Methods:** We retrospectively analyzed 102 patients (78 male; age >18 years) at high cardiovascular risk. PCSK9 inhibitors group included 34 patients on PCSK9 inhibitors (evolocumab or alirocumab) with biweekly or monthly dose, in combination with statin therapy plus ezetimibe. Statin group included 68 patients on statin, with or without ezetimibe. All patients were stratified in 3 sub-groups: fully adherent, partially adherent or nonadherent. Adherence to statin was measured using pill counts and/or 4-items Morisky scale, considering "fully adherent" patients with adherence ≥80% or a total score of 0, "partially adherent" adherence >40% and <80% or a score of 1 to 2, and "nonadherent" adherence ≤40% or a score of 3 to 4. Adherence to PCSK9 inhibitors was measured with pen counts dividing "fully adherent" (≥80%), partially adherent (>40% to <80%) and nonadherent (≤40%) patients. Our endpoints were level of adherence to PCSK9 inhibitors in comparison with statin, and level of adherence to statin in PCSK9 inhibitors group in comparison with statin group.
**Results:** Clinical characteristics (including age, BMI, sex male) and cardiovascular risk profile were well balanced in the two groups, except for higher prevalence of dyslipidemia in PCSK9 inhibitors group. All patients had history of myocardial infarction. Level of adherence to PCSK9 inhibitors was higher than statin (79.4% vs 30.9% "fully adherent", p=0.75; 11.8% vs 54.4% "partially adherent"; 8.8% vs 14.7% "nonadherent"). In addition, the percentage of patients "fully adherent" to statin resulted higher in PCSK9 group than in statin group (51.8% vs 30.9%; p=0.15).



Adherence to PCSK9 inhibitors and statin

**Conclusions:** In real-world setting, PCSK9 inhibitors may reveal higher level of adherence than statin. In addition, the use of PCSK9 inhibitors may also positively influence patients' adherence to statin. In our study, non-statistically significant results were probably due to low number of patients. PCSK9 inhibitors may represent an interesting therapeutic opportunity to overcome nonadherence barriers in selected patients. Further studies with more numerous populations are needed to confirm our findings.

### P1514 | BEDSIDE
### Predictive value of the INTERHEART-cholesterol score for long-term prognosis of patients with acute coronary syndrome

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**Introduction:** The INTERHEART study was a case-control study of myocardial infarction that derived in a specific score to predict the incidence of acute coronary syndromes (ACS) in contrast to other scores that predict coronary heart disease incidence or mortality; one of its variations was mainly based on lipid values, the so-called INTERHEART-cholesterol (IHc) score. We assessed the predictice value of the IHc score in patients admitted with ACS for hospital and long-term mortality as well as recurrent cardiovascular events.
**Methods:** Prospective and observational study of all consecutive patients admitted in a single centre. The IHc score was assessed according to the original publication: age (males >55 or females >65: 2 points), LDL-c (<77 mg/dl: 0, 77–116 mg/dl: 1, 116–151 mg/dl:2, >151 mg/dl: 5), HDL-c (<40 mg/dl:2), Smoking (former: 2, current 1–5 cig/d: 2, current 6–10 cig/d: 4, current 11–20 cig/d: 7, current >20 cig/d: 11), diabetes (yes: 7) and hypertension (yes: 6). Patients were divided in tertiles according to the score obtained. Mortality multivariate analyses were performed by Cox regression and results are presented as hazard ratio (HR). Recurrent major cardiovascular events (MACE), including ACS, heart failure, stroke and major bleeding, rate was assessed by negative binomial regression and results are presented as incidence rate ratio (IRR).
**Results:** We included 1729 patients, mean age 68.4 (12.9) years, 83.0% males, 33.8% STEMI and mean GRACE score 142.0 (42.8). Mean IHc score was 12.6 (5.5) and patients and the patients with IHc score ≥17 were included in the third tertile. An increasing pattern in the prevalence of risk factors was noted in each IHc score tertile and the GRACE score was higher in patients within the third tertile as compared to the rest (145.4±2.0 vs. 140.5±1.2; p=0.03); in contrast, a decreasing pattern was noted as the IHc score increased: 37.2%; 32.1%; 29.9% (p=0.02). Hospital mortality was 3.9% and it has higher in each IHc score tertile: 2.7%; 3.5%; 6.1% (p=0.01). Post-discharge median follow-up was 34.1 months (IQ range 28–33). All-cause mortality was 16.1% and it was increasingly higher in each IHc score (10.4%; 16.8%; 23.2; p<0.01), as happened also for cardiovascular mortality (7.1%; 11.5%; 16.7; p<0.01) or recurrent ACS (12.9%; 13.4%; 21.0; p<0.01). Multivariate analysis identified the third tertile of the IHc as independently associated with higher all-cause mortality (HR: 1.56 95% CI 1.00–2.42; p=0.048), cardiovascular mortality (HR: 1.69 95% CI 0.98–2.91; p=0.058) and (IRR: 1.52 95% CI 1.29–1.80; p<0.01).
**Conclusions:** The third tertile of the IHC score (≥17) identified patients with higher cardiovascular and all-cause mortality risk as well as higher incidence of recurrent MACEs.

### P1515 | BEDSIDE
### Rate of cholesterol goal attainment in patients with coronary heart disease: Results from the Dyslipidemia International Study II

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**Background:** Current guidelines for the management of dyslipidemia confirmed the LDL-C-target of <70mg/dl in very high risk patients. The objective of the second Dyslipidemia International Study (DYSIS II) was to document LDL-C goal attainment among patients with coronary heart disease (CHD) or acute coronary syndrome (ACS).
**Methods:** The CHD cohort of DYSIS II included patients from 17 countries of Asia, Europe, and the Middle East aged ≥18 and with a complete fasting lipid profile. Patients were classified as treated (on lipid-lowering therapy [LLT] for ≥3 months) or untreated (not on LLT). Lipid profiles were assessed in all patients, and LDL-C goal (<70 mg/dL) attainment and kind of LLTs in treated patients was documented. Multivariable logistic regression was performed to identify variables predictive of LDL-C target attainment.
**Results:** We identified 6,794 patients with CHD, of whom 6,370 (93.8%) were on LLT. Mean LDL-C concentrations were significantly different between treated and untreated patients (86 mg/dL versus 117 mg/dL; P<0.001). The LDL-C target was attained by 30.6% of treated patients. Statin monotherapy was the most commonly used LLT (82.3% of treated patients), with atorvastatin the most frequently used statin (52.5% of statin users). The mean atorvastatin dose equivalent was 25±18 mg/day. The atorvastatin dose equivalent was predictive of slightly higher