egories. Group 3 patients received less antiplatelet agents, statin, beta-blocker, ACE-I or ARB during the first 48 hours after admission as at discharge compared to both Groups 1 and 2
TRS 2P score successfully defined residual risk of death at one year (C-statistic 0.78): 1-year survival was 98% in Group 1, 94% in Group 2, and 78.5% in Group 3 ($P<0.001$). Using Cox multivariate analysis, Group 3 was associated with higher rate of death at 1-year (HR=4.61; 95% CI: 3.61–5.89, $p<0.001$), as Group 2 (HR=2.08; 95% CI: 1.62–2.65, $p<0.001$) compared to Group 1. The score appeared robust and correlated well with mortality in STEMI (C-statistic 0.77) and NSTEMI (c-statistic 0.78) populations, as well as in each of the historical cohorts separately: 2005 (c-statistic 0.76), 2010 (c-statistic 0.78) and 2015 (c-statistic 0.78) [Figure 1].
Conclusions: The TRS-2P appears to be a robust risk score, identifying patients at high-risk after AMI irrespective of the type of MI and historical period.

P5349
The CHA2DS2-VASc risk score predicts all-cause and cardiovascular mortality following first myocardial infarction

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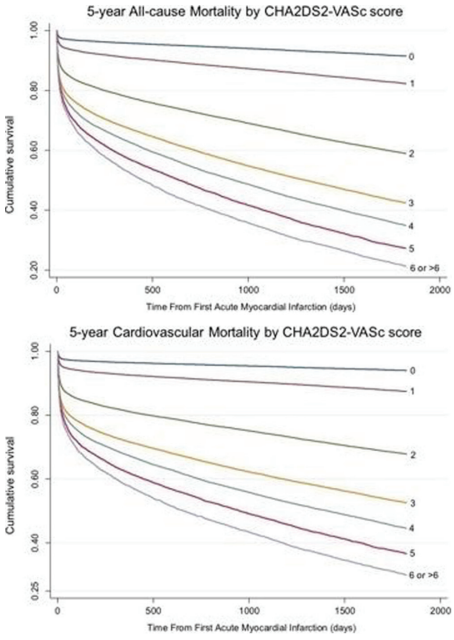
Background: Ischemic heart disease is a leading cause of death. Accurate risk assessment after acute myocardial infarction (AMI) is important. The CHA2DS2-VASc risk score has shown promise in quantifying the risk of adverse outcome following AMI in smaller scale studies.
Purpose: To evaluate the usefulness of the CHA2DS2-VASc risk score in quantifying the risk of both short-term and long-term mortality following AMI.
Methods: We enrolled 177,563 first AMI patients over the age of 18 from Danish nationwide registries during the period 1996–2015 and followed them from their first AMI until death or January 1st, 2017. End points were all-cause mortality and cardiovascular death. We calculated the CHA2DS2-VASc at the time of AMI for each patient and related it to subsequent short-term and long-term survival (no point was given for AMI in the "vascular disease" category, since all patients had suffered an AMI).
Results: The risk of death from all causes and cardiovascular death increased progressively with increasing baseline CHA2DS2-VASc score. The 30-day risk of death associated with baseline CHA2DS2-VASc risk scores 0 through 5 and 6 was 2.7%, 5.4%, 13.1%, 18.9%, 20.7%, 22.6% and 24.1%, respectively (p-value for trend: $p<0.001$) (Figure). Risks were similar when considering only cardiovascular death (Figure). The 5-year risk of death associated with baseline CHA2DS2-VASc scores 0 through 5 and 6 was 8.5%, 17.7%, 41.1%, 57.6%, 65.1%, 72.8% and 78.8%, respectively (p-value for trend: $p<0.001$) (Figure). Risks were similar when considering only cardiovascular death (Figure). The CHA2DS2-VASc performed well in predicting both short-term and long-term all-cause mortality and cardiovascular death following AMI (All-cause mortality: 30-day risk C-statistic 0.695, 5-year risk 0.767) (Cardiovascular death: 30-day risk C-statistic 0.694, 5-year risk C-statistic 0.750).
Conclusion: The CHA2DS2-VASc risk score effectively quantifies long-term and short-term risk of death following first AMI.



5-year mortality by CHA2DS2-VASc score

P5350
Potential utility of the SCORE risk estimator to predict fatal cardiovascular events in a North American population: CARTaGENE cohort

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Background: The SCORE risk estimator for fatal cardiovascular (CV) events has been well validated in European regions at low- and high-risk for CV events. However, its applicability in North-American populations has not been verified. We sought to examine the predictive value of SCORE in patients without prior CV disease in Quebec, Canada.
Methods: The CARTaGENE cohort was a cross-sectional study randomly selected participants in Quebec (2009–2010). We included patients only from 40–70 years and excluded patients with prior CV history for this analysis. We censored fatal CV events by using the provincial health administrative datasets. We computed the cumulative 5-year CV death rate to determine the CV risk profile of our cohort and the applicable SCORE risk estimator. Finally, we evaluated the discrimination of the model by computing the area under the receiver-operating curves (AUC).
Results: There were 19,599 subjects, 52% females with a mean age of 54.2 years. The mean LDL, HDL, TC/HDL ratio were 3.0, 1.2, 4.5 mmol/L respectively. The mean glycated hemoglobin was 5.7%. There were 0.6% of patients with diabetes mellitus type 1 and 7.0% patients with diabetes mellitus type 2 The 5-year incidence rates of stroke and myocardial infarction were 0.4% and 0.7%, respectively. At 5 years, there were 252 deaths including 35 of CV causes (257 and 36 per 100,000 person-year, respectively). The cumulative 5-year CV death rate was 0.17% which was similar to the European regions at low risk for CV deaths. The low-risk SCORE estimator performed well to predict 5-year CV death in our cohort with an AUC of 0.75 (95% confidence intervals: 0.67–0.83) (Figure 1)

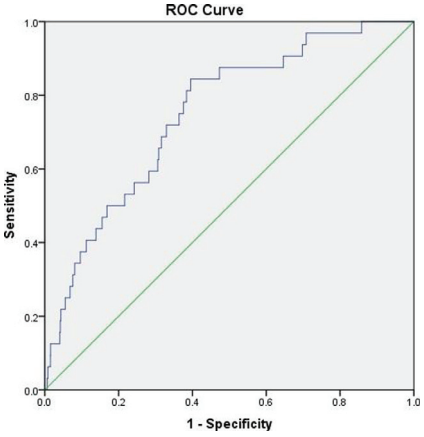

Figure 1

Conclusion: The SCORE risk estimator for regions at low risk of CV deaths had good predictive values in our cohort. This risk estimator may be used for risk stratification in primary prevention of fatal CV events in North American populations.
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P5351
Relationship between serial c-reactive protein levels and cardiovascular events in East asian patients treated with percutaneous coronary intervention

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Background: The CANTOS trial demonstrated that canakinumab can significantly reduce the risk of recurrent cardiovascular (CV) events in MI survivors with the high level of hs-CRP ($\geq$2 mg/L). East Asians have shown the lower levels of inflammation surrogates compared with Western population, and it remains uncertain how the high-risk East Asian patients can be properly selected using the level of hs-CRP.
Methods: Serial hs-CRP levels (on-admission and one-month post-PCI) were measured in 3,324 patients undergoing PCI. Patients were stratified into 4 groups according to hs-CRP cutoff of 2 mg/L: (1) persistent low hs-CRP (n=1,845, 55.5%); (2) high on-admission/low one-month hs-CRP (n=673, 20.2%); (3) low on-admission/high one-month hs-CRP (n=203, 6.1%); and (4) persistent high hs-CRP (n=603, 18.1%). MACE was defined as a composite of CV death, non-fatal MI, and ischemic stroke.
Results: With a median follow-up of 35.7 (IQR: 17.2, 55.9) months, MACE was occurred in 7.0% of the cohort. Compared with on-admission hs-CRP values, one-month follow-up measures were decreased (median 1.2 [IQR: 0.5, 3.7] vs.