External validation of PRECISE-DAPT score and PARIS bleeding risk score in a real-world cohort of patients with acute coronary syndrome

D.R.P.P. Chan Pin Yin, D.M.F. Claassens, F.P. Van Baal, G.J. Vos, J. Peper, J.C. Kelder, J.M. Ten Berg

St Antonius Hospital, Nieuwegein, Netherlands (The) On behalf of FORCE-ACS study group Funding Acknowledgement: Type of funding source: None

Background: In patients with acute coronary syndrome (ACS) shortened duration of dual antiplatelet therapy (DAPT) should be considered in those at high risk of bleeding. Risk scores may be used to assess the bleeding risk, but their predictive value remains unclear.

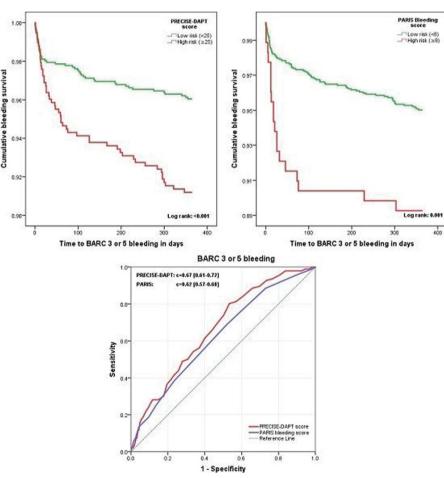
Purpose: To externally validate and compare the PRECISE-DAPT and the PARIS bleeding risk scores in patients with ACS.

Methods: From January 2015 to June 2018, all patients admitted with ACS were consecutively included in a single center, observational, prospective registry with follow-up of at least one year. In all patients, the PRECISE-DAPT and the PARIS risk-score were retrospectively assessed. Primary endpoint was moderate or severe bleeding defined as Bleeding Academic Research Consortium (BARC) 3 or 5 bleeding within one year after ACS. Kaplan-Meier curves showed the probability of bleeding during follow-up as

assessed by both scores. Score discrimination using c-statistic were calculated and calibration curves were visually assessed.

Results: 2,729 patients were included for analysis. 93.6% were discharged with \geq 2 antithrombotic drugs. At one year follow-up, the event rate of moderate or severe bleeding was 5.5%. High bleeding risk as stratified by both risk scores was associated with higher bleeding rates. Discriminative values for BARC 3 or 5 bleeding at one year were 0.67 [95% CI 0.61–0.72] for the PRECISE-DAPT score and 0.62 [95% CI 0.57–0.68] for the PARIS bleeding score (p=0.31).

Conclusion: The PRECISE-DAPT and the PARIS bleeding scores both showed adequate discriminative performances in predicting moderate or severe bleeding in this study.



Kaplan-meier and ROC-curves