

## Editorial



# Requirements of a Usable Scoring System for Risk Stratification in Patients With Coronary Artery Disease

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Several scoring systems exist for personalized risk stratification in patients with coronary artery disease (CAD). However, it is doubtful whether these scoring systems are widely used in clinical practice.<sup>1)</sup> These systems are usually complex for improving prediction accuracy. It is required extensive time to calculate risk, or the aid of a web-based calculator.<sup>2)</sup> In addition, after calculating the risk score, most risk score systems cannot be applied to a specific clinical practice after defining patient risk.<sup>3)</sup>

In this edition of the *Korean Circulation Journal*, Song et al.<sup>4)</sup> showed the clinical effects of P2Y12 receptor inhibitor monotherapy after 3 months of dual antiplatelet therapy (DAPT) compared with standard 12-month DAPT based on ischemic risk stratification in patients who underwent percutaneous coronary intervention (PCI). In the present study, the CHADS-P2A2RC risk score was used as a tool for ischemic risk estimation. This score system was developed to predict arterial thromboembolic events such as ischemic stroke, transient ischemic attack, and systemic embolism in patients without atrial fibrillation who underwent coronary angiography.<sup>5)</sup> The major findings of the present study were as follows: (1) The CHADS-P2A2RC risk score is valuable in discriminating ischemic risk for patients who underwent PCI, and (2) the de-escalation strategy with early aspirin cessation was associated with a lower incidence of bleeding irrespective of ischemic risks compared with standard 12-month DAPT.

Based on these results, the question remains whether the CHADS-P2A2RC risk score should be calculated for patients who underwent PCI due to CAD. The answer is absolutely not. No discriminative points were shown between the low and high ischemic risk groups in this risk score. In contrast, patients with high-risk non-ST elevation acute coronary syndrome (ACS) assessed using the Global Registry of Acute Coronary Events (GRACE) risk score as >140 showed clinical benefits after early invasive therapy in The Timing of Intervention in Acute Coronary Syndromes (TIMACS) trial.<sup>6)</sup> Therefore, the GRACE score calculation is recommended for selecting strategies with regard to the timing of revascularization in the European Society of Cardiology ACS guidelines.<sup>7)</sup> If the aim of the present study was to emphasize the benefits of a de-escalation strategy with early aspirin cessation in detail similar with the previous report

**Conflict of Interest**

The authors have no financial conflicts of interest.

**Data Sharing Statement**

The data generated in this study is available from the corresponding author upon reasonable request.

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from other study,<sup>8)9)</sup> using the CHADS-P2A2RC risk score was an optimal choice. However, to introduce the good risk score system, it would be completely unsuccessful.

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