In a post hoc analysis of 2 large randomized clinical trials, Hijazi and colleagues tested the ability of the ABC-bleeding risk score—which incorporates age, biomarkers, and clinical history—to assess the risk of bleeding in a cohort of patients with atrial fibrillation treated with both an oral anticoagulant for stroke prevention and concomitant aspirin. In addition to clinical factors, the ABC-bleeding risk score also incorporates the biomarkers high-sensitivity troponin T, growth differentiation factor-15, and hemoglobin, which were collected at the time of randomization in 14,980 patients in the ARISTOTLE (Apixaban for Reduction in Stroke and Other Thromboembolic Events in Atrial Fibrillation) trial and 9,369 patients in the RE-LY (Randomized Evaluation of Long-Term Anticoagulation Therapy) trial. The investigators found that patients with a low ABC-bleeding risk score had a low absolute bleeding rate with or without concomitant aspirin treatment, whereas those with a higher ABC-bleeding risk score had a higher rate of bleeding with concomitant aspirin compared with oral anticoagulation alone.

This study addresses the important issue of how to treat patients with indications for concomitant anticoagulation and antiplatelet therapy because of coexisting atrial fibrillation and stable coronary artery disease—an overlap that occurs in 20% to 30% of patients with atrial fibrillation. Although prior studies have suggested that the ABC-bleeding risk score is better than other scores that rely solely on clinical variables, none, to our knowledge, has specifically tested the ABC-bleeding risk score in cohorts of patients receiving aspirin therapy in addition to anticoagulation.

We propose that the ABC-bleeding risk score performs best in cases when bleeding risk is low but there is concern about continuing aspirin. When faced with a patient who needs anticoagulation for atrial fibrillation and also has a preexisting indication for aspirin, a clinician may be reassured by a low ABC-bleeding risk score to safely continue dual antithrombotic therapy with aspirin and an anticoagulant, at least for 2 years. The density curves presented by Hijazi et al suggest that the majority of patients studied in these trials were in this low-risk category, supporting the findings in low-risk populations.

Despite the strengths of the analysis, it is important to note that aspirin was prescribed in both the ARISTOTLE and RE-LY trials by choice, not by chance. Without randomization, the patients taking aspirin (30% of patients in ARISTOTLE and 20% of patients in RE-LY) were likely to garner benefits outweighing risks of concomitant aspirin therapy. If these patients received aspirin specifically because their bleeding risk was low, it is difficult to know whether the risk stratification generated from the ABC-bleeding risk score can apply to other patients in whom similar individual preassessments have not yet been made.

The ABC-bleeding risk score may gain a foothold in practice if we understand how it was created and what it is intended to measure. The understanding that a low ABC-bleeding risk score is associated with a low risk of bleeding in the population treated with an anticoagulant and concurrent aspirin may facilitate the assumption that the benefit of antiplatelet therapy is worthwhile, as long as clinicians recognize that the score itself is not a direct measure of net benefit and therefore cannot be used in isolation. Although Hijazi and colleagues uncoupled the risks and benefits of concomitant aspirin therapy in the present analysis, the clinician must still balance the bleeding risk against the ischemic benefit of aspirin in the decision-making process to maximize the usefulness of the ABC-bleeding risk score.
We urge caution in extrapolating the ABC-bleeding risk score beyond the group of patients with stable coronary disease. Despite the inclusion of troponin in the score, the applicability of the present study’s findings to patients with acute coronary syndromes remains unknown because of the variable risk profiles and competing benefits in different populations. Fewer than 20% of patients in ARISTOTLE or RE-LY had a history of myocardial infarction. For patients in whom indications for aspirin may be stronger than for those enrolled in the present study, the clinician must still face the question, “What is the risk of stopping aspirin in patients at high risk for ischemic events?”

From a practical perspective, the added value of the ABC-bleeding risk score must also be weighed against the cost of additional resources, expended by both the clinician and patient, to obtain the biomarkers needed to generate the score. Although the European writing committee has already incorporated the ABC-bleeding risk score into their guidelines, uptake in the real world has yet to be seen. The problem with the score’s utility in low-risk patients is that they often have a straightforward clinical picture anyway, reducing the clinician’s need to gather more data to guide decision-making. After all, low-risk patients are rarely the ones we worry about. As for high-risk patients, it is unclear whether clinicians will be willing to do the heavy lifting required to measure the biomarkers and calculate the score if, by design, it only generates half of the equation balancing bleeding and ischemic risk.

We believe that the ABC-bleeding risk score shows promise as an improved and validated assessment of bleeding that expands the clinician’s repertoire to guide decisions where overlap of indications and competing risks can be complex. The next step would be an independent validation of the ABC-bleeding risk score in a similar cohort of patients as well as a prospective assessment of the score in higher-risk patients with a recent acute coronary syndrome.

**ARTICLE INFORMATION**

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