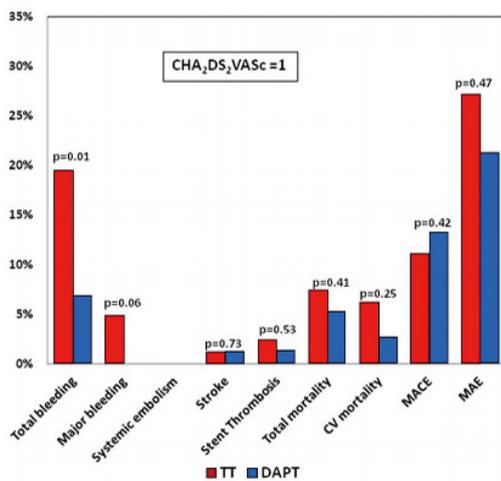


Risk stratification key to preventing stroke in atrial fibrillation patients undergoing percutaneous stenting

The insertion of stents by percutaneous coronary intervention is a minimally invasive non-surgical procedure but one that is nonetheless associated with risks of thromboembolism. In patients with ischemic heart disease, the standard approach to the prevention of such events is dual antiplatelet therapy, a combination of aspirin and a P2Y12 inhibitor, which aims primarily at minimizing the risk of stroke. However, ischemic heart disease is frequently complicated by atrial fibrillation (AF), for which oral anticoagulants are often prescribed. Such combinations of dual antiplatelet therapy with an anticoagulant are referred to as 'triple therapy', but the jury remains out on the optimal risk/benefit balance of this regimen.

In [a new prospective observational study](#) published in *Circulation Journal*, Antonia Sambola et al. compared the safety and efficacy of triple therapy in patients with AF undergoing percutaneous coronary interventions. Their evaluation of 585 patients revealed that while triple therapy provided some protection against thromboembolism in higher-risk patients, it delivered no benefit in the lower-risk group. Importantly, bleeding risk was elevated in both groups, and patients in the high-risk group experienced significantly more major bleeding events.

This multicenter study assigned patients with non-valvular AF into two groups based on the CHA₂DS₂-VASc scoring system, a collective rating of stroke risk based on factors including congestive heart failure, hypertension, age, diabetes, prior thromboembolism, vascular disease, and gender, recommended by major international cardiology groups. Slightly more than one-fourth of the patients observed had a CHA₂DS₂-VASc score of 1, while the remainder were in the higher-risk cohort of CHA₂DS₂-VASc ≥ 2.



Incidence of adverse events in patients with CHA₂DS₂-VASc=1

Patients in the CHA₂DS₂-VASc =1 group treated with triple therapy had a similar incidence of stroke to those treated with dual antiplatelet therapy, but a considerably higher incidence of bleeding events (19.5% vs. 6.9%).

Importantly, none of the dual antiplatelet therapy cohort experienced a major bleeding event, compared to 4.9% of the triple therapy group. For the CHA₂DS₂-VASc ≥ 2 patients, the picture for triple therapy was slightly more favorable, as it reduced stroke incidence compared with dual antiplatelet therapy (1.7% vs. 5.3%). However this cohort also experienced a higher rate of bleeding events on treatment with triple therapy.

These new findings are of particular clinical importance as, since the introduction of the CHA₂DS₂-VASc score, the number of patients receiving dual antiplatelet therapy who are also indicated for oral anticoagulants is likely to rise. As noted in [an editorial in the same issue](#), clinicians

should consider an individualized risk-based strategy in patients receiving percutaneous coronary intervention for AF.