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TICAGRELOR MONOTHERAPY AFTER PCI ACROSS THE SPECTRUM OF HIGH-RISK PATIENTS: A DEEP DIVE INTO THE TWILIGHT TRIAL

Moderated Poster Contributions
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Background: The TWILIGHT trial showed that aspirin discontinuation after 3 months of aspirin plus ticagrelor reduces bleeding without increasing ischemic events across a broad spectrum of high-risk patients undergoing percutaneous coronary intervention (PCI). Whether these benefits are preserved across different risk strata remains unknown.

Methods: Patients had to fulfill ≥1 clinical and ≥1 angiographic high-risk criterion to be enrolled in TWILIGHT. In this post-hoc analysis, we stratified patients into 4 groups based on the number of fulfilled criteria: 2, 3, 4, or ≥5. The primary outcome was Bleeding Academic Research Consortium (BARC) type 2, 3, or 5 bleeding, while the secondary outcome was a composite of death, myocardial infarction, or stroke.

Results: The proportion of patients (n=7,119) with 2, 3, 4, or ≥5 risk factors was 21.5%, 32.7%, 27.4%, and 18.4%, respectively. A stepwise increase in ischemic (P_{trend}<0.001) and bleeding risk (P_{trend} = 0.032) was observed in the overall population while moving from low to high-risk groups. As compared with ticagrelor plus aspirin, ticagrelor monotherapy consistently reduced BARC 2, 3, or 5 bleeding across risk strata (P_{int} = 0.186) (**Figure 1A**), without a significant increase in ischemic events (P_{int} = 0.942) (**Figure 1B**).

Conclusion: Among high-risk patients undergoing PCI, the benefits of ticagrelor monotherapy with respect to both bleeding and ischemic outcomes were consistent across patients with an increasing number of high-risk features.