SUPPLEMENTAL MATERIAL

TITLE: Ticagrelor Monotherapy versus Ticagrelor with Aspirin in Acute Coronary Syndrome Patients with a High Risk of Ischemic Events

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This material includes:

Supplementary Methods

Supplemental Figure I. Time-to-event curves for clinical outcomes by high-ischemic risk Kaplan–Meier estimates for major adverse cardiac and cerebrovascular events (A), major bleeding (B), and net adverse clinical events (C). ACS, acute coronary syndrome; CI, confidence interval; HR, hazard ratio; PCI, percutaneous coronary intervention

Supplemental Figure II. Risks of clinical outcomes by complex PCI and antiplatelet therapy strategy.

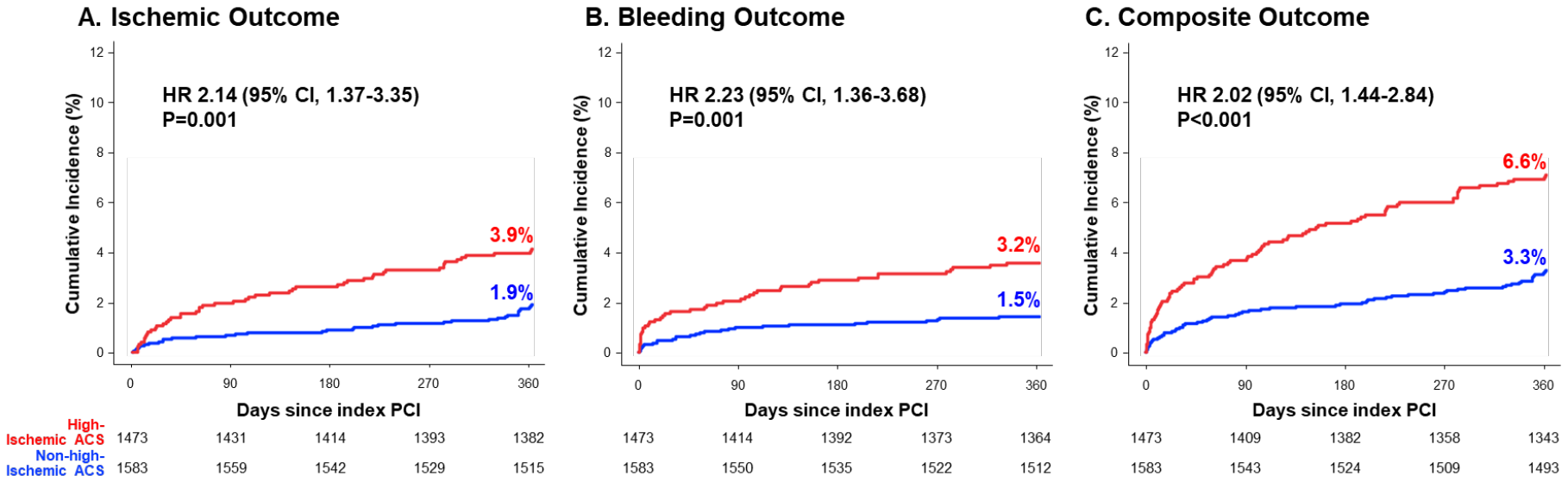
Supplemental Figure III. Time-to-event curves for the clinical outcomes by landmark analysis at 3 months after index PCI.

Supplemenaty Methods

Study outcomes

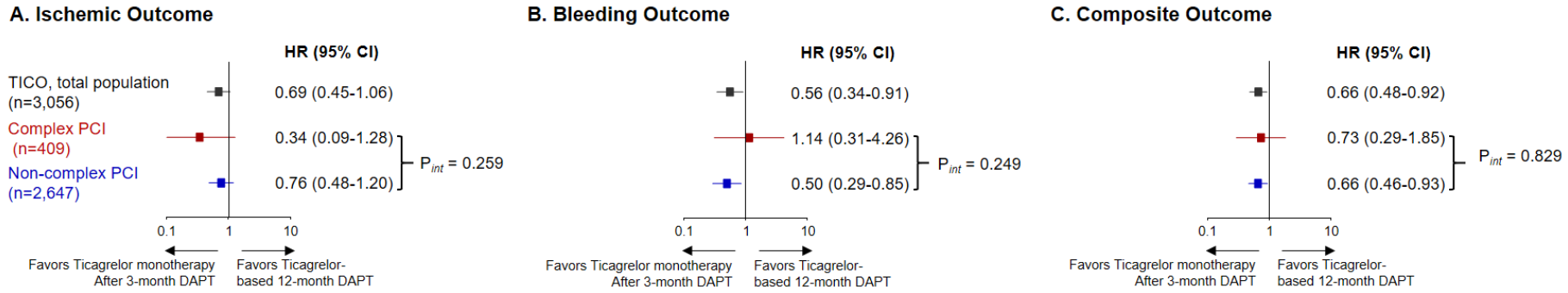
Myocardial infarction (MI) after discharge from the hospital was defined as clinical symptoms, electrocardiography changes, or abnormal findings on imaging studies, combined with a creatine kinase MB fraction above the upper normal limits or a troponin T or troponin I level >99th percentile of the upper normal limit [22]. Stent thrombosis was defined as definite or probable stent thrombosis according to the Academic Research Consortium [23]. Stroke was defined as an acute cerebrovascular event that resulted in death or a neurological deficit lasting >24 hours or as an acute infarction identified by imaging studies [24]. Target-vessel revascularization was defined as a repeat PCI or bypass surgery of the target-vessel with either: (1) ischemia symptoms or a positive stress test and angiographic diameter stenosis >50%; or (2) angiographic diameter stenosis >70% without ischemia symptoms or a positive stress test [25,26]. Major bleeding was defined according to the Thrombolysis in Myocardial Infarction (TIMI) criteria: intracranial bleeding, hemorrhage associated with a ≥5 g/dL decrease in hemoglobin, or fatal bleeding that resulted in death within 7 days [14]. Routine follow-up of angiography was not recommended in the trial. Adverse events, including ischemic and bleeding events, were categorized by an independent clinical event committee blinded to the treatment assignments and primary results of the trial [4].

Supplemental Figure 1. Time-to-event curves for clinical outcomes by high-ischemic risk



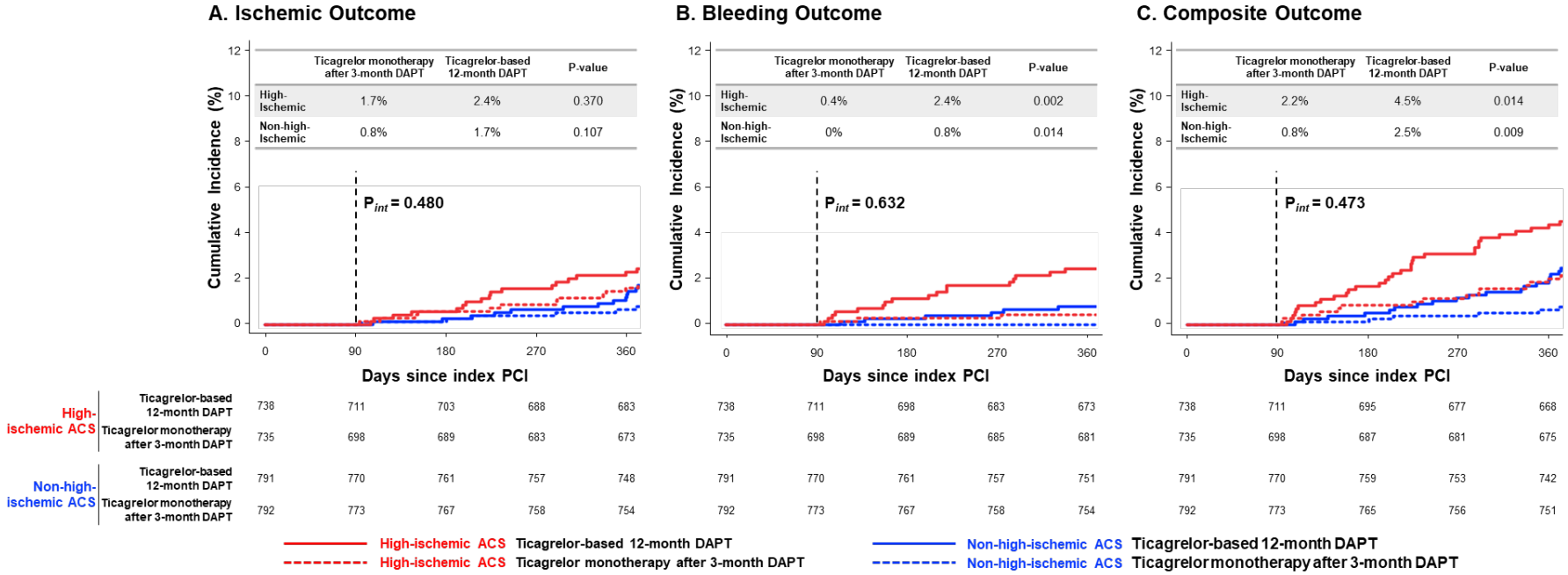
Kaplan–Meier estimates for major adverse cardiac and cerebrovascular events (A), major bleeding (B), and net adverse clinical events (C). ACS, acute coronary syndrome; CI, confidence interval; HR, hazard ratio; PCI, percutaneous coronary intervention

Supplemental Figure 2. Risks of clinical outcomes by complex PCI and antiplatelet therapy strategy



Relative risks for major adverse cardiac and cerebrovascular evetns (**A**), major bleeding (**B**), and net adverse clinical events (**C**) are presented. There was no significant interaction between the treatment strategy and the presence of complex PCI features. P_{int} indicates P-values from Cox regression test of therapy × complex PCI interaction. CI, confidence interval; DAPT, dual antiplatelet therapy; HR, hazard ratio; PCI, percutaneous coronary intervention.

Supplemental Figure 3. Time-to-event curves for the clinical outcomes by landmark analysis at 3 months after index PCI.



Kaplan–Meier estimates for major adverse cardiac and cerebrovascular events (**A**), major bleeding (**B**), and net adverse clinical events (**C**) between 3 and 12 months after index PCI. P_{int} indicates P-values from Cox regression test of therapy × high-ischemic risk interaction. Haldane-Anscombe correction was used for calculation of hazard ratios in bleeding outcomes by landmark analysis at 3-months after PCI. ACS, acute coronary syndrome; CI, confidence interval; HR, hazard ratio; PCI, percutaneous coronary intervention.