

# TICO

## Randomized Evaluation of Ticagrelor Monotherapy After 3-month Dual-antiplatelet Therapy (DAPT) in patients with Acute Coronary Syndrome (ACS)

### Conclusions

- In the TICO trial, among ACS patients treated with Orsiro®, ticagrelor monotherapy after 3-m DAPT showed significantly lower rates of Net Adverse Clinical Events (NACE) compared to 12-m conventional DAPT therapy (3.9% vs. 5.9%, HR 0.66 [95% CI 0.48-0.92], p = 0.01).
- The difference in the primary endpoint was mainly driven by significantly lower rates of major bleeding (1.7% vs. 3.0%, p = 0.02) favoring the ticagrelor monotherapy arm.
- These findings suggest that ticagrelor monotherapy after 3-m DAPT could be an optimal strategy, balancing ischemic and bleeding risks for ACS patients treated with the ultrathin strut Orsiro DES.

### Study design

Prospective, multicentre, randomized (1:1), Korean trial

### Endpoints

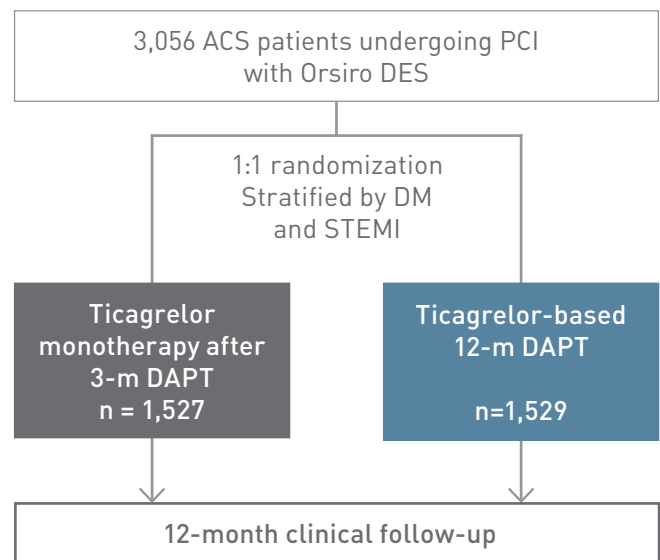
#### Primary Endpoints

Net Adverse Clinical Events (NACE) at 12 months follow-up defined as the composite of:

- Major Bleeding
- Major Adverse Cardiac and Cerebrovascular Events (MACCE)

#### Secondary Endpoints

- TIMI Major Bleeding
- MACCE – composite of all-cause death, Myocardial Infarction, Stent Thrombosis, Stroke or Target Vessel Revascularization
- Individual components of MACCE

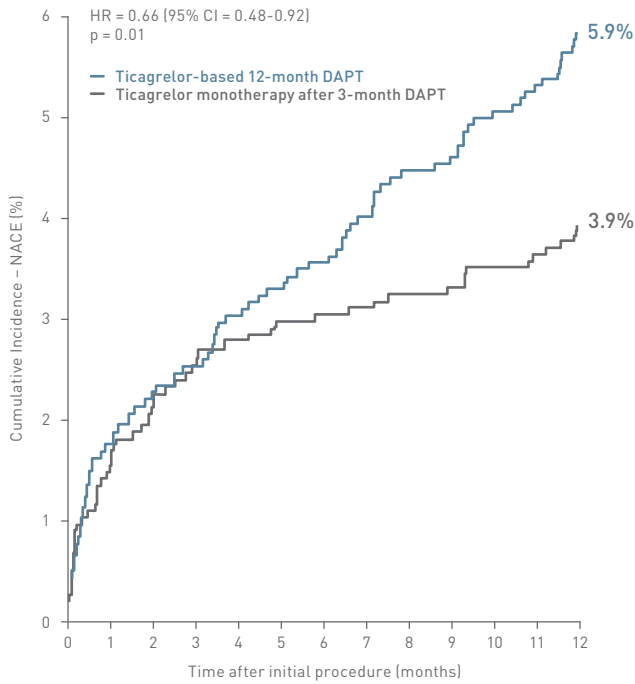


### Baseline Characteristics

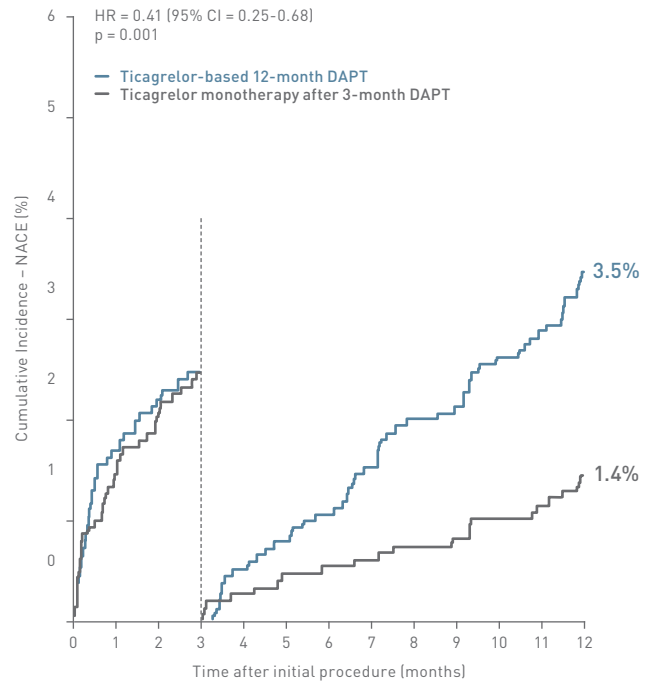
	Ticagrelor monotherapy after 3-m DAPT n = 1,527	Ticagrelor based 12-m DAPT n = 1,529
Age (years)	61 ± 11	61 ± 11
Male gender	79%	80%
Diabetes mellitus	27%	27%
Hypertension	50%	51%
Previous MI	4%	3%
Previous PCI	9%	8%
Clinical Presentation		
Unstable angina	29%	32%
NSTEMI	35%	32%
STEMI	36%	36%
2 or 3 vessel disease	55%	56%

Baseline characteristics were similar between the two groups.

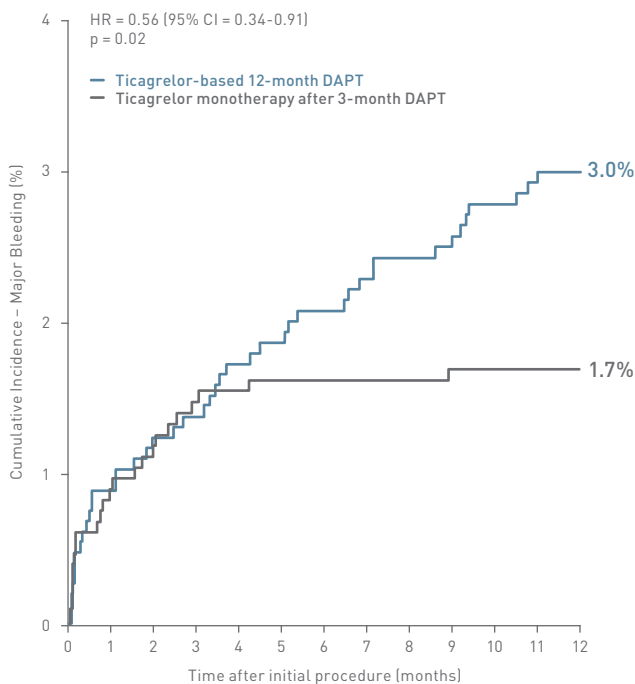
## Primary Endpoint - NACE at 12 Months<sup>1</sup>



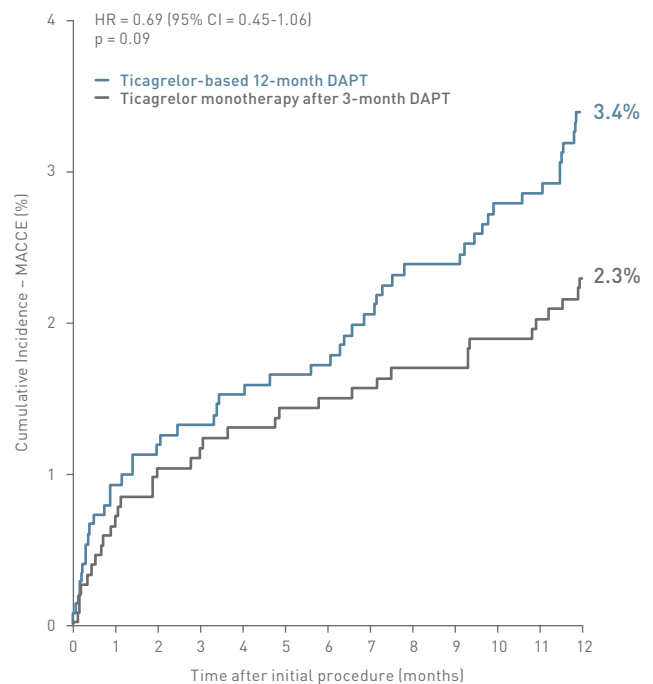
## 3-Month NACE Landmark Analysis<sup>1</sup>



## Major Bleeding at 12 Months<sup>1</sup>



## MACCE at 12 Months<sup>1</sup>



## Principal investigator

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1. Kim Byeong-Keuk et al. Effect of Ticagrelor Monotherapy vs. Ticagrelor with Aspirin on Major Bleeding and Cardiovascular Events in Patients with Acute Coronary Syndrome. The TICO Randomized Clinical Trial. JAMA.2020;323(23):2407-2416.doi:10.1001/jama.2020.7580.

Clinical data conducted with Orsiro, Orsiro Mission's predecessor device can be used to illustrate Orsiro Mission clinical outcomes. Orsiro and Orsiro Mission are trademarks or registered trademarks of the BIOTRONIK Group of Companies.