

ISAR-REACT 5: Ticagrelor Versus Prasugrel in Patients With Acute Coronary Syndrome

Background: Prasugrel and Ticagrelor are recommended for treatment for one year after ACS.

Purpose: Compare ticagrelor versus prasugrel in patients with acute coronary syndrome - intracoronary stenting and antithrombotic regimen: rapid early action for coronary treatment.

Design: N = 4,000. Prospective, randomized trial, parallel assignment, single masking. Final analysis n = 4,018.

Primary endpoints: Composite of death, myocardial infarction or stroke at one year (reported here).

Secondary endpoints: Bleeding, mortality stroke, MI, stent thrombosis, all at up to a year

Adverse events	Ticagrelor (n=2012)	Prasugrel (n=2006)	Hazard Ratio (95% CI)
Death	4.5% (n=90)	3.7% (n=73)	1.23 (CI = 0.91-1.68)
Myocardial Infarction	4.8% (n=96)	3.0% (n=60)	1.63 (CI = 1.18-2.25)
Stroke	1.1 (n=22)	1.0 (n=19)	1.17 (CI = 0.63-2.15)

Results: Primary endpoint of death, MI or stroke – Ticagrelor – 9.3% (n=184), Prasugrel – 6.9% (n=137), HR = 1.36 (CI=1.09-1.70), p= 0.006.

In patients with ACS with or without ST-segment elevation, Prasugrel compared with Ticagrelor reduced the composite rate of death, MI or stroke at one year without an increase in major bleeding.

