Dual Antiplatelet Therapy for Shock Patients with Acute Myocardial Infarction - DAPT SHOCK AMI trial

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Faculty: 3LF
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Cardiogenic shock (CS) is a devastating and often fatal complication of acute myocardial infarction (AMI), with a high risk of death despite urgent intervention. CS can influence how medications are absorbed and act in the body. The DAPT-SHOCK-AMI trial is the first randomized, multicentre, placebo-controlled study to evaluate whether cangrelor, an intravenous P2Y12 inhibitor, can improve outcomes for patients with CS-AMI undergoing primary angioplasty. Conducted in five countries and involving 605 patients, the study compares intravenous cangrelor with ticagrelor administered as crushed tablets at a loading dose of 180 mg. The primary endpoint is a composite of all-cause death, myocardial infarction or stroke within 30 days.

The project will follow patients for five years to determine the long-term effects of the initial antithrombotic strategy on the risk of heart failure and to guide secondary prevention after myocardial infarction in the highest-risk patients. The research team is also working on the PRE-DAPT-SHOCK-AMI trial, led by Zuzana Moťovská at Charles University, which aims to initiate cangrelor treatment at the first point of contact through emergency medical services to address the high mortality before hospital admission.

The international consortium includes the Icahn School of Medicine at Mount Sinai, the University of Freiburg, the University of Tübingen, Jagiellonian University and Nicolaus Copernicus University. Collaboration within this network has also led to joint participation in major European initiatives, such as the Horizon 2020-supported RITA 2 study organised by Université Paris-Cité and INSERM.