

Risk estimation in patients with established atherosclerotic cardiovascular disease: comparison of 4 and validation of 2 risk prediction models for recurrent cardiovascular events in a Swiss multicentric cohort

Marc Jean-Gilles, Cédric Follonier, Orestis Efthimiou, David Carballo, David Nanchen Lorenz Räber Roland Klingenberg Stephan Windecker, Thomas F. Lüscher, Christian M. Matter, Olivier Muller, Nicolas Rodondi, François Mach, Baris Gencer





Background, objective and endpoints

- Cardiovascular diseases: a significant burden on Swiss Healthcare System, leading cause of death and third leading cause of hospitalisation in 2022¹
- Overall long-term cardiovascular risk can vary across individuals, even in secondary prevention population
- Unlike primary prevention scores, secondary risk prediction scores are poorly known and underutilized



Objective: "To evaluate the **performance** of four secondary risk prediction scores and identify **the most suitable one** for treatment and follow up of **Swiss patients with coronary artery disease**"

<u>1° endpoint</u>: Major Adverse Cardiovascular Event (MACE) at 1 and 5 years <u>2° endpoint</u>: components of 1° endpoint; coronary revascularisation; unstable angina at 1 and 5 years







Potential Implications – Swiss Perspective

- SPUM-ACS consortium: ≈ **7000 Swiss** patients, **multicentric** cohort, **25**% of patients from **Lausanne**
- Enhanced individualized risk assessment and improved decision-making in the Swiss secondary prevention population
- Identifying potential gaps in existing risk scores and the need for a "tailor made" risk score specifically for the Swiss population with coronary artery disease







Potential Implications – Global **Perspective**

Improving the use of secondary prevention scores: A Paradigm Shift

From **«class risk»** assessment to a more **«individualized risk»** approach, **even in** secondary prevention populations

- Identifying very high-risk patients who will benefit the most (intensification of available therapies)
 - **Optimizing resource allocation** (low-income countries and cost of emerging therapies)
 - **Enhancing communication** between healthcare providers and patients

A step forward in the development of personalized cardiovascular prevention









Thank you for your attention!





