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ISSUE SUMMARY
Acute Coronary Syndromes

Revolutionizing cardiac care: insights into shock prognosis, myocardial infarction management, and platelet inhibition

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Join us in the August 2024 issue of the *European Heart Journal: Acute Cardiovascular Care* for an exploration of groundbreaking studies that redefine acute cardiac care. This month, we spotlight pivotal research unveiling key insights into cardiogenic shock prognosis, personalized management of myocardial infarction, and innovative strategies in platelet inhibition. Three seminal studies lead the charge in unravelling the complexities of cardiogenic shock prognosis. These investigations not only illuminate predictive models crucial for identifying high-risk patients but also provide clinicians with invaluable tools to optimize therapeutic interventions.

Our editorial choice highlights the potentially transformative impact of prehospital tirofiban in ST-segment elevation myocardial infarction (STEMI) patients undergoing primary percutaneous coronary intervention. Rikken *et al.*[1] present compelling evidence from the On-TIME 2 trial, demonstrating that prehospital administration of tirofiban significantly increases the rate of 'disrupted MI' in STEMI patients. This finding, defined by peak high-sensitive cardiac troponin T levels ≤10 times the upper limit of normal, underscores tirofiban as an independent predictor of improved myocardial salvage and as an available approach to mitigating myocardial damage during acute coronary syndrome.

Watson *et al.*'s[2] groundbreaking study introduces the validated CREST model, designed to predict circulatory aetiology death following out-of-hospital cardiac arrest (OHCA). By comparing its efficacy with the SCAI shock classification, this study offers clinicians a refined tool for prognostication and therapeutic decision-making in OHCA, highlighting the potential to enhance patient selection for invasive interventions.

Further enriching this issue, Patel *et al.*[3] and Lopes present pioneering insights into proteomic profiling of cardiogenic shock within the cardiac intensive care unit. Their study identifies nine biomarkers associated with cardiogenic shock, including sST2, FGF-23, CTSD, and GDF-15, thereby establishing a robust multi-marker model with diagnostic potential to facilitate early detection and personalized treatment strategies in critical care settings.

Manning *et al.*[4] navigate the complexities of end-of-life care discussions within cardiac care units, unveiling evidence-based approaches to enhance shared decision-making for seriously ill older adults. Their insights offer structured frameworks to mitigate common pitfalls, ensuring patient-centred care aligns with individual values and preferences amidst the challenges of advanced heart disease.

We invite you to join us in this month's journey through these transformative studies. Each manuscript in this issue represents a pivotal advancement in acute cardiovascular care, from refining predictive models and therapeutic strategies to unveiling new biomarkers and guiding personalized patient management. We are confident that the discoveries within these pages will inspire further research, inform clinical practice, and ultimately improve outcomes for patients facing acute cardiac emergencies globally!

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Data availability

No new data were generated or analysed in support of this research.

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