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Welcome, esteemed readers, to our March 2024 issue of the *European Heart Journal Acute Cardiovascular Care*. In this edition, we explore cutting-edge research that promises to reshape our understanding of acute cardiac and intensive care!

The spotlight of this edition is Stampe *et al.*'s¹ groundbreaking study that illuminates the path towards a better understanding of survival post-sudden cardiac arrest (SCA). This research casts a light on the critical role of ventricular fibrillation (VF). Stampe *et al.* have meticulously conducted a distinctive proteomic analysis, delving into VF within 12 h of ST-segment elevation myocardial infarction symptoms. They report 26 associated proteins, including the notable candidates ACTBL2 and F13A1, that open promising avenues that may help unravel the intricate VF proteome. In the spirit of scientific rigour, despite inherent limitations, the authors stress the significance of diverse validations. This collaborative approach not only navigates the challenges posed by the dynamic nature of SCA but also underscores the indispensable need for broader validations in forthcoming investigations.

Moving forward, Nakano *et al.*² introduce us to a novel research letter addressing triglyceride deposit cardiomyopathy (TGCV), a relatively unknown but emerging cardiovascular disorder with profound implications. The scarcity of real-world data on TGCV's prevalence is met with a meticulous investigation involving 400 acute coronary syndrome (ACS) patients and 148 ACS patients with diabetes. The study reports a 4.3–5.4% prevalence, associating TGCV with coronary artery disease (CAD) and unveiling potential therapeutic implications. We eagerly anticipate further research on this intriguing topic that promises to deepen our comprehension of its global impact on cardiovascular mortality.

Transitioning to the realm of intensive care, Nasu *et al.*³ take us on a journey into the Impella device's role in managing fulminant myocarditis. This challenging clinical scenario, often bereft of pharmacological options, is dissected through the lens of the Japanese Registry for Percutaneous Ventricular Assist Devices. The study reports a promising 74.3% survival at 30 days among 269 patients. Adverse events, notably bleeding and renal deterioration, underscore the challenges, prompting a call for further investigation into patient selection and treatment.

In a comprehensive examination of sex-specific age variations post-first-time ACS, Earle *et al.*⁴ unravels nuanced relationships within a cohort of 63 245 individuals. The findings highlight age-specific sex

distinctions, with younger women at heightened risk and older women at diminished risk compared with their male counterparts. Adjusted analysis negates the heightened risk for younger women, emphasizing the importance of recognizing and addressing these age-specific nuances in ACS outcomes.

Bringing a capstone to this educational journey, Zuin *et al.*⁵ deal with 'Early predictors of clinical deterioration in intermediate–high risk pulmonary embolism'. Their educational paper is complemented by a clinical consensus statement from the Association for Acute Cardiovascular Care that outlines the diagnostic and treatment pathways for acute right ventricular failure secondary to acutely increased right ventricular afterload (*acute cor pulmonale*). The document serves as a rallying cry for a unified approach across disciplines, especially in life-threatening conditions.

In closing, we extend a warm welcome to Dr Lam's letter to the editor and encourage our readership to engage with our community, fostering vibrant discussions. Join us on social media for updates and engagement and let us collectively shape the future of acute cardiac and intensive care.

Enjoy your reading!

Conflict of interest: none declared.

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