# **Special Issue**

# Advancements in Cardiac Electrophysiology Through Biomedical Engineering for Abnormality Monitoring and Detection in Clinical Practice

# Message from the Guest Editors

Cardiac electrophysiologists diagnose arrhythmias, i.e., abnormalities in the heart rhythm, perform tests to determine their causes, and provide the proper treatment. Cardiac arrhythmias can increase the risk of serious complications and also become life-threatening. In this context, biomedical engineering provides technical instruments for supporting clinicians in detecting and monitoring arrhythmias, sometimes preventing severe or even malignant events. Advanced risk assessment technologies are becoming more and more available in clinical practice. All these technologies are intended to help make care practices more efficient and improve patient outcomes. The aim of this Special Issue is to collect the advancements that cardiac electrophysiology has reached or has the potential to reach in clinical practice thanks to the tools provided by biomedical engineering working in the cardiac field. In this Special Issue, a diverse range of contributions are welcome to make the point about present knowledge and possible future directions.

### **Guest Editors**

Dr. Ilaria Marcantoni

Department of Information Engineering, Engineering Faculty, Università Politecnica delle Marche, 60131 Ancona, Italy

#### Prof. Michela Casella

- 1. Cardiology and Arrhythmology Clinic, University Hospital "Ospedali Riuniti Umberto I-Lancisi-Salesi", 60126 Ancona, Italy
- Department of Clinical, Special and Dental Sciences, University Hospital "Umberto I-Lancisi-Salesi", Marche Polytechnic University, 60126 Ancona, Italy

### Deadline for manuscript submissions

30 August 2025



# Journal of Clinical Medicine

an Open Access Journal by MDPI

Impact Factor 2.9 CiteScore 5.2 Indexed in PubMed



#### mdpi.com/si/210069

Journal of Clinical Medicine Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 jcm@mdpi.com

mdpi.com/journal/

icm





# Journal of Clinical Medicine

an Open Access Journal by MDPI

Impact Factor 2.9 CiteScore 5.2 Indexed in PubMed





# About the Journal

## Message from the Editorial Board

There has been an explosion of gene and target based research and therapeutics in the multitude of fields that compose clinical medicine. The *Journal of Clinical Medicine*'s (*JCM*) staff and editorial board are dedicated to providing cutting edge, timely, and peer-reviewed articles covering the diverse subspecialties of clinical medicine. The journal publishes concise, innovative, and exciting research articles as well as clinically significant articles and reviews that are pertinent to the myriad of disciplines within medicine. The articles published are relevant to both primary care physicians and specialists. The journal's full-texts are archived in PubMed Central and indexed in PubMed. Please consider submitting your manuscripts for publication to our journal and check us out on-line!

### **Editors-in-Chief**

Prof. Dr. Emmanuel Andrès

Internal Medicine Department, University Hospital Strasbourg, 67000 Strasbourg, France

Prof. Dr. Kent Doi

Department of Acute Care Medicine, University of Tokyo, Tokyo, Japan

#### **Author Benefits**

## **High Visibility:**

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Embase, CAPlus / SciFinder, and other databases.

#### **Journal Rank:**

JCR - Q1 (Medicine, General and Internal) / CiteScore - Q1 (General Medicine)

# **Rapid Publication:**

manuscripts are peer-reviewed and a first decision is provided to authors approximately 17.7 days after submission; acceptance to publication is undertaken in 2.7 days (median values for papers published in this journal in the first half of 2025).