

## Special Issue

# Machine Learning in Cardiac Imaging

### Message from the Guest Editors

For many years, machine learning algorithms are having a significant impact on cardiac imaging. A simple query to search engines allows us to verify that, during the last few years, the number of articles published on machine learning applied to cardiac imaging has exponentially grown. Ultrasounds (US), computed tomography (CT), magnetic resonance (MR), and single photon emission computed tomography (SPECT) are some radiology techniques used in cardiology for morphological and functional evaluations. Machine learning-based methods applied to images and data provided by these techniques have allowed the development of tools to aid clinicians in the diagnosis and prognosis of cardiovascular diseases. Deep learning, adaptive algorithms, extreme gradient boosting, and decision trees are some of the machine learning procedures used for the quantitative assessment of images as well as risk analysis in cardiac patients. In this situation, this special issue of *Diagnostics* is planned for providing information about the state-of-the-art of cardiac imaging by quantitative analysis obtained using machine learning approaches.

---

### Guest Editors

Dr. Rosario Megna

Institute of Biostructure and Bioimaging, National Council of Research,  
Via De Amicis 95, 80145 Naples, Italy

Dr. Carmela Nappi

Department of Advanced Biomedical Sciences, University Federico II,  
Via Pansini 5, 80131 Naples, Italy

---

### Deadline for manuscript submissions

closed (30 June 2024)



## Diagnostics

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.3  
CiteScore 6.9  
Indexed in PubMed



[mdpi.com/si/151719](https://mdpi.com/si/151719)

*Diagnostics*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[diagnostics@mdpi.com](mailto:diagnostics@mdpi.com)

[mdpi.com/journal/  
diagnostics](https://mdpi.com/journal/diagnostics)





# Diagnostics

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.3  
CiteScore 6.9  
Indexed in PubMed



[mdpi.com/journal/  
diagnostics](https://mdpi.com/journal/diagnostics)



## About the Journal

### Message from the Editor-in-Chief

You are cordially invited to submit research articles, short communications, comprehensive reviews, case reports or interesting images for consideration and publication in *Diagnostics* (ISSN 2075-4418). *Diagnostics* is published in open access format – research articles, reviews and other contents are released on the Internet immediately after acceptance. The scientific community and the general public have unlimited and free access to the content as soon as it is published. We would be pleased to welcome you as one of our authors.

---

### Editor-in-Chief

Prof. Dr. Andreas Kjaer

Department of Clinical Physiology, Nuclear Medicine & PET National University Hospital, Rigshospitalet, University of Copenhagen, Blegdamsvej 9, DK-2100 Copenhagen, Denmark

---

### Author Benefits

#### High Visibility:

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

#### Journal Rank:

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

#### Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 21.6 days after submission; acceptance to publication is undertaken in 2.7 days (median values for papers published in this journal in the second half of 2025).