

Special Issue

Artificial Intelligence in Sports Medicine: Diagnosis and Management

Message from the Guest Editor

Artificial intelligence (AI) is advancing sports medicine by improving diagnostics, streamlining decisions, and personalizing monitoring. This Special Issue highlights validated AI methods for early detection and management of conditions affecting athletic performance and safety.

Submissions are invited on:

- Sports cardiology: automated ECG interpretation, arrhythmia/cardiomyopathy detection, AI-assisted echocardiography/CPET, and cardiac death risk prediction.
- Musculoskeletal diagnostics: computer vision and multimodal algorithms for detecting tissue/bone pathology, reinjury risk, and return-to-play assessment.
- Performance physiology: sensor and wearable data for quantifying neuromuscular function, training stress, biomechanics, and fatigue.
- Biomarker profiling: biochemical, hormonal, and multi-omics signatures for identifying maladaptation, overtraining, and physiological dysregulation.
- Validation and governance: evaluating AI tools for diagnostic accuracy, decision transparency, and clinical oversight.

This Special Issue aims to advance scientifically validated AI that complements medical expertise and supports athlete well-being across training, competition, and recovery.

Guest Editor

Prof. Dr. Anca Ionescu

Faculty of Medicine, University of Medicine and Pharmacy "Carol Davila", 020022 Bucharest, Romania

Deadline for manuscript submissions

31 December 2026



Diagnostics

an Open Access Journal
by MDPI

Impact Factor 3.8
CiteScore 6.9
Indexed in PubMed



mdpi.com/si/261338

Diagnostics
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
diagnostics@mdpi.com

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





Diagnostics

an Open Access Journal
by MDPI

Impact Factor 3.8
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 20.4 days after submission; acceptance to publication is undertaken in 2.9 days (median values for papers published in this journal in the first half of 2026).