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SPECIAL ISSUE AT OPEN MEDICINE

INNOVATIVE BIOMARKER DISCOVERY AND PRECISION MEDICINE IN CANCER DIAGNOSTICS

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IMPORTANT DATES AND HOW TO SUBMIT

To Submit a paper please use our system: https://www.editorialmanager.com/openmed/

As a Section Category please choose: SI Biomarker Discovery and Precision Medicine.

Submissions to this special issue can expect 10% discount for publication.

Deadline for manuscripts submission: : 31 August 2026.

OVERVIEW

Cancer continues to be one of the most significant global health challenges, with early detection, accurate diagnosis, and personalized treatment being critical to improving patient survival rates and quality of life. Among them, advances in the identification of new diagnostic biomarkers are crucial to improving patient outcomes. Recent advancements in genomics, proteomics, metabolomics, and AI-driven technologies have accelerated the identification of novel biomarkers that can detect cancers at early stages, predict therapeutic responses, and monitor disease progression. Precision medicine, which tailors treatments based on the genetic and molecular profiles of individual patients, is becoming a cornerstone of modern oncology.

Therefore, this special issue will focus on the latest advances in cancer diagnostics, combining innovative biomarkers and precision medicine. By exploring the latest breakthroughs in biomarker discovery and application, this issue aims to bridge the gap between scientific research and clinical practice, providing new insights into cancer detection, prognosis, and treatment. This special issue will also focus on the emerging role of artificial intelligence and machine learning in biomarker discovery and integration, as well as the development of minimally invasive diagnostic technologies such as liquid biopsies, which can monitor cancer dynamics in real time. In addition, this special issue will discuss the ethical, regulatory, and clinical challenges faced in translating these biomarkers from the bench to the bedside.

AIMS AND SCOPE

This special issue seeks to provide a comprehensive overview of the latest advancements in biomarker discovery and precision medicine in cancer diagnostics, covering innovative methodologies, translational research, and clinical applications. By focusing on both basic and applied research, this special issue will demonstrate how these technologies can improve the accuracy and timeliness of cancer diagnosis and enable more effective, personalized treatment strategies.

Potential Topics of Interest include, but are not limited to:

- New diagnostic biomarker for early detection of cancer
- Proteomics and metabolomics in cancer diagnosis
- Latest approaches to personalized cancer diagnosis and therapy
- Clinical validation and translational challenges of new biomarkers
- Application of liquid biopsy in minimally invasive cancer detection and real-time disease monitoring
- Application of artificial intelligence in biomarker discovery and cancer imaging
- Minimally invasive diagnostic technologies for cancer detection, monitoring and personalized treatment
- Biomarker-driven targeted therapy and personalized treatment
- Technological advances in innovative biomarker discovery and analysis
- Ethical, legal, and social implications of biomarker use in cancer diagnosis

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KEYWORDS

Biomarker Discovery; Precision Medicine; Cancer Diagnostics; Early Detection; Liquid Biopsy; Artificial Intelligence (AI); Proteomics and Metabolomics; Personalized Treatment; Minimally Invasive Technologies; Translational Research.