Special Issue

Applications of Mass Spectrometry-Based Methods to Explore the Impact of Circadian Rhythms on Disease

Message from the Guest Editor

The circadian clock is a molecular endogenous timekeeping system that allows organisms to adjust their physiology and behavior to geophysical time. Mass spectrometry (MS) is now regarded as a universal tool with high sensitivity for any possible applications. Understanding the circadian regulation of molecular processes through MS-based methods is crucial for unraveling the complex interactions between circadian rhythms and diseases, ultimately leading to the development of targeted therapeutic interventions. Therefore, we welcome the submission of full-length research articles, review articles, and short communications covering the following topics of interest for this Special Issue:

- Mass spectrometry-based absolute quantification reveals rhythmic variation in circadian clock lipids, proteins, and metabolites.
- Multiomics approach to study the potential biomarkers in circadian rhythm using mass spectrometry.
- New method development in mass spectrometry to explore the impact of circadian rhythm on disease.
- Mass spectrometry studies to study the circadian variations in drug metabolism and pharmacokinetics.

Guest Editor

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Deadline for manuscript submissions

closed (30 September 2025)



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Message from the Editor-in-Chief

Biomedicines (ISSN 2227-9059) is an open access iournal devoted to all aspects of research on human health and disease, the discovery and characterization of new therapeutic targets, therapeutic strategies, and research of naturally driven biomedicines, pharmaceuticals, and biopharmaceutical products. Topics include pathogenesis mechanisms of diseases, translational medical research, biomaterial in biomedical research, natural bioactive molecules, biologics, vaccines, gene therapies, cell-based therapies, targeted specific antibodies, recombinant therapeutic proteins, nanobiotechnology driven products, targeted therapy, bioimaging, biosensors, biomarkers, and biosimilars. The journal is open for publication of studies conducted at the basic science and preclinical research levels. We invite you to consider submitting your work to Biomedicines, be it original research, review articles, or developing Special Issues of current key topics.

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