Special Issue

Molecular Biomarkers for Viral Infection

Message from the Guest Editor

Molecular biomarkers have emerged as invaluable tools in the diagnosis and management of viral infections, offering insights into disease progression, treatment efficacy, and prognosis. Several molecular agents may serve as biomarkers, such as nucleic acids, proteins, and metabolites. Importantly, their presence or alteration is crucial for the host's immune response. Nucleic acid-based biomarkers, like viral RNA or DNA, provide direct evidence of viral replication within host cells, enabling sensitive detection through techniques like PCR or next-generation sequencing. Additionally, host gene expression profiles offer insights into immune responses and viral pathogenesis, providing important data for disease severity prediction. Protein biomarkers, including viral antigens or host immune factors, serve as indicators of active infection, aiding in early diagnosis and in monitoring treatment response. Furthermore, metabolomic signatures reflect the dynamic interplay between the virus and host metabolism, offering potential targets for therapeutic intervention and personalized medicine approaches.

Guest Editor

Dr. Paulina Niedźwiedzka-Rystwej

1. Institute of Biology, University of Szczecin, Szczecin, Poland
2. Center for Experimental Immunology and Immunobiology in Infectious Diseases and Cancer, University of Szczecin, Szczecin, Poland

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

mdpi.com/journal/viruses

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Message from the Editor-in-Chief

Viruses (ISSN 1999-4915) is an open access journal which provides an advanced forum for studies of viruses. It publishes reviews, regular research papers, communications, conference reports and short notes. Our aim is to encourage scientists to publish their experimental and theoretical results in as much detail as possible. There is no restriction on the length of the papers. The full experimental details must be provided so that the results can be reproduced. We also encourage the publication of timely reviews and commentaries on topics of interest to the virology community and feature highlights from the virology literature in the 'News and Views' section.

Electronic files or software regarding the full details of the calculation and experimental procedure, if unable to be published in a normal way, can be deposited as supplementary material.

Editor-in-Chief

Dr. Eric O. Freed
HIV Dynamics and Replication Program, Center for Cancer Research, National Cancer Institute, Frederick, MD 21702-1201, USA

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