# **Special Issue**

# Human Cytomegalovirus Therapeutic Strategies and Clinical Applications

Message from the Guest Editor

Human cytomegalovirus (HCMV) is the most common congenital infection worldwide and significantly impacts morbidity, mortality, and cost of care after transplantation. It affects pregnancies, child health, and transplant outcomes. Despite its critical impact on human health, treatment options for HCMV are limited. The nucleoside analog ganciclovir (GCV) and its oral formulation val-GCV improved transplant outcomes, val-GCV may prevent hearing deterioration in congenitally infected children. However, long-term use can lead to severe bone marrow toxicity and resistance. Alternative drugs for GCV-resistant HCMV, foscarnet, and cidofovir, also target viral DNA polymerase; both are nephrotoxic and require intravenous administration. New agents like the terminase inhibitor letermovir and the UL97 kinase inhibitor maribavir have been approved for specific HCMV cases. Given the emergence of resistance to all agents, there's a great need for additional treatment options for HCMV, including new therapeutic strategies. The Special Issue will focus on recent advances in HCMV therapeutic strategies and specific treatment considerations for patients at risk for CMV disease.

### **Guest Editor**

Dr. Ravit Arav-Boger

Department of Pediatrics, Division of Infectious Disease, Medical College of Wisconsin, Milwaukee, WI 53226, USA

# Deadline for manuscript submissions

30 November 2025



# **Viruses**

an Open Access Journal by MDPI

Impact Factor 3.5 CiteScore 7.7 Indexed in PubMed



mdpi.com/si/220905

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

mdpi.com/journal/ viruses





# Viruses

an Open Access Journal by MDPI

Impact Factor 3.5 CiteScore 7.7 Indexed in PubMed



# **About the Journal**

# Message from the Editor-in-Chief

You are invited to contribute a research article or a comprehensive review for consideration and publication in *Viruses* (ISSN 1999-4915). *Viruses* is published in open access format—research articles, reviews and other content are released on the internet immediately after acceptance. The scientific community and the general public have unlimited free access to the content as soon as it is published. As an open access journal, *Viruses* is supported by the authors or their institutes by payment of article processing charges (APC) for accepted papers. We would be pleased to welcome you as one of our authors.

## **Editor-in-Chief**

Dr. Eric O. Freed

HIV Dynamics and Replication Program, Center for Cancer Research, National Cancer Institute, Frederick, MD 21702-1201, USA

#### **Author Benefits**

## **High Visibility:**

indexed within Scopus, SCIE (Web of Science), PubMed, MEDLINE, PMC, Embase, PubAg, and other databases.

# **Journal Rank:**

JCR - Q2 (Virology) / CiteScore - Q1 (Virology/Infectious Diseases)

## **Rapid Publication:**

manuscripts are peer-reviewed and a first decision is provided to authors approximately 18.6 days after submission; acceptance to publication is undertaken in 2.5 days (median values for papers published in this journal in the first half of 2025).

