

## Special Issue

# Recent Advances in Oncolytic Viruses Research

### Message from the Guest Editor

Oncolytic virus serves as a new therapeutic approach to cancer treatment that destroys cancer cells by preferential infection, replication, and induction of cell death. Oncolytic virus infection also represents an effective means of exposing neoantigens to immune cells and disrupting a suppressive TME, as evidenced by the success of talimogene laherparepvec (T-VEC) for the treatment of melanoma. Overwhelming molecular changes in cancer cells can be induced by oncolytic virus, including gene expression, cytokine/chemokine production, antigen presentation, and cell survival and/or cell death pathway activation, which are in favor of facilitating host defense against virus infection and cancer cell growth. The issue will focus on potent virus identification and modification, genetic engineering, preclinical models, clinical approaches, mechanism of response and resistance, toxicity, and challenges. The overall objective of this Special Issue is to introduce cutting-edge advances and discuss new strategies in the field of oncolytic immunotherapy of cancer.

---

### Guest Editor

Dr. Edward Wenge Wang

Department of Medical Oncology & Therapeutics Research, City of Hope National Med Center, Duarte, CA, USA

---

### Deadline for manuscript submissions

closed (31 December 2022)



## Viruses

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.5  
CiteScore 7.7  
Indexed in PubMed



[mdpi.com/si/100814](https://mdpi.com/si/100814)

*Viruses*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[viruses@mdpi.com](mailto:viruses@mdpi.com)

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

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





# Viruses

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.5  
CiteScore 7.7  
Indexed in PubMed



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



## 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 17.2 days after submission; acceptance to publication is undertaken in 2.7 days (median values for papers published in this journal in the second half of 2025).