

## Special Issue

# Oncolytic Viruses for Cancer Immunotherapy

### Message from the Guest Editor

Oncolytic viruses are considered powerful additions to the arsenal of anticancer agents. They are unique in their combined activities of inducing selective cancer cell killing, propagating and self-amplifying in solid tumors and promoting anti-tumor immune responses. In recent years, several important improvements in oncolytic virus design and delivery methods were made to enhance their safety and efficacy for cancer treatment. Furthermore, mechanistic studies deepened our understanding of how oncolytic viruses work within the tumor microenvironment. Promising results from clinical trials and the first granted market approvals for oncolytic-virus-based cancer therapies underscore the growing recognition of oncolytic immunotherapy as a viable option for treating cancer. This Special Issue of *IJMS* intends to provide an overview of the latest advances in the field and to present innovations driving the field forward, as well as studies addressing challenges encountered in applying oncolytic viruses in cancer treatment.

### Guest Editor

Prof. Dr. Victor van Beusechem

Department Medical Oncology, Amsterdam UMC, Cancer Center Amsterdam, Vrije Universiteit, Amsterdam, The Netherlands

### Deadline for manuscript submissions

closed (31 October 2024)



## International Journal of Molecular Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.9  
CiteScore 9.0  
Indexed in PubMed



[mdpi.com/si/186723](https://mdpi.com/si/186723)

*International Journal of  
Molecular Sciences*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[ijms@mdpi.com](mailto:ijms@mdpi.com)

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





# International Journal of Molecular Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.9  
CiteScore 9.0  
Indexed in PubMed



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



## About the Journal

### Message from the Editor-in-Chief

The *International Journal of Molecular Sciences (IJMS)* is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, and molecular biophysics. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

---

### Editor-in-Chief

Prof. Dr. José L. Quiles  
Department of Physiology, Institute of Nutrition and Food Technology  
"Jose Mataix", Biomedical Research Center, University of Granada,  
Avda. Conocimiento s/n, 18100 Armilla, Granada, Spain

---

### Author Benefits

#### Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

#### High Visibility:

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

#### Journal Rank:

JCR - Q1 (Biochemistry and Molecular Biology) / CiteScore - Q1 (Organic Chemistry)