# 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

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## Deadline for manuscript submissions

closed (31 December 2022)

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# About the Journal

## 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
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