



## Algorithms and Data Analysis of High Throughput Sequencing in Cancers

Guest Editors:

**Dr. Luciano Cascione**

1. Institute of Oncology Research,  
Faculty of Biomedical Sciences,  
Università della Svizzera Italiana,  
6500 Bellinzona, Switzerland  
2. Swiss Institute of  
Bioinformatics, 1015 Lausanne,  
Switzerland

**Dr. Marco Bolis**

Laboratory of Molecular Biology,  
Mario Negri Institute for  
Pharmacological Research,  
20156 Milano, Italy

Deadline for manuscript  
submissions:

**closed (31 December 2023)**

### Message from the Guest Editors

Dear Colleagues,

The acquisition of cancer hallmarks requires molecular alterations at multiple levels, including genome, epigenome, transcriptome, proteome, and metabolome levels. High-throughput DNA sequencing has contributed to the identification of cancer-specific mutations, epigenetic alterations, and molecular subtyping of tumors.

Moreover, large-scale tumor molecular profiling programs across different cancer types hold the promise of improving diagnostics, prognostics, and personalized treatment.

High-throughput omics data create huge bioinformatic challenges including storage, transmission, manipulation, and analysis, making the downstream processing of data a daunting task.

Therefore, new bioinformatic methods are required to biologically extract sequencing data from meaningful information and present them in an easily interpretable format.

In this Special Issue, we will discuss bioinformatic methodologies and statistical approaches, with a special emphasis on how the omics data are being analyzed, stored, and manipulated to aspire or create new ways of diagnosing and treating cancers.





an Open Access Journal by MDPI

## Editor-in-Chief

### Prof. Dr. Samuel C. Mok

Department of Gynecologic  
Oncology and Reproductive  
Medicine, The University of Texas  
MD Anderson Cancer Center,  
Houston, TX 77030, USA

## Message from the Editor-in-Chief

*Cancers* (ISSN 2072-6694) is an international, online journal addressing both clinical and basic science issues related to cancer research. The journal will continue its open access format, which will certainly evolve to ensure that the journal takes full advantage of the rapidly changing world of information and knowledge dissemination. It publishes high-quality clinical, translational, and basic science research on cancer prevention, initiation, progression, and treatment, as well as other related topics, particularly to capture the most seminal studies in the rapidly growing area of immunology, immunotherapy, and tumor microenvironment.

## 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, Embase, CAPlus / SciFinder, and other databases.

**Journal Rank:** JCR - Q2 (Oncology) / CiteScore - Q1 (Oncology)

## Contact Us

---

*Cancers* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/cancers](http://mdpi.com/journal/cancers)  
[cancers@mdpi.com](mailto:cancers@mdpi.com)  
[X@Cancers\\_MDPI](https://twitter.com/Cancers_MDPI)