



## Role of Cytokines and Their Receptors in Human Tumors and Immune-Regulation

Guest Editor:

**Prof. Dr. Spaska Stanilova**

Department of Molecular Biology,  
Immunology and Medical  
Genetics, Medical Faculty, Trakia  
University, Armeiska 11 Street,  
Stara Zagora 6000, Bulgaria

Deadline for manuscript  
submissions:

**closed (20 February 2025)**

### Message from the Guest Editor

Dear Colleagues,

Cytokines are the main signaling molecules for the development of the immune response. After binding to their specific receptors on different types of immune cells, signal transduction pathways are activated, affecting the functional activity, proliferation, and differentiation of target cells. These processes concern both immune and tumor cells, as well as the development of tumor growth and metastasis. Further understanding of the induced cytokine signature in the tumor microenvironment will provide deeper insight into the molecular mechanisms of immune regulation during tumorigenesis. These new data can provide important information regarding the practical approach to the treatment of different tumor types.

This Special Issue will provide a platform for the newest scientific research concerning the molecular mechanisms of the regulation of cytokines and their receptors in immune cells in the tumor milieu. Original articles and reviews on signal transduction involving cytokines and their receptors, molecular genetics and epigenetics regulation, cell biology and immunology, and related fields, focusing on tumor development and metastasis, are welcome.





an Open Access Journal by MDPI

## 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

## 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.

## 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, CAPlus / SciFinder, and other databases.

**Journal Rank:** JCR - Q1 (Biochemistry and Molecular Biology) / CiteScore - Q1 (Organic Chemistry)

## Contact Us

---

*International Journal of Molecular  
Sciences* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
www.mdpi.com

mdpi.com/journal/ijms  
ijms@mdpi.com  
X@IJMS\_MDPI