



an Open Access Journal by MDPI

## Molecular Drivers of Responsiveness to Cancer Immunotherapy

Guest Editors:

**Dr. Venkatesh Hegde**

Department of Thoracic/Head and Neck Medical Oncology, University of Texas MD Anderson Cancer Center, Houston, TX, USA

**Dr. Stephanie M. Dorta-Estremera**

Cancer Biology Division, University of Puerto Rico Comprehensive Cancer Center, San Juan PR; Department of Microbiology and Medical Zoology, University of Puerto Rico Medical Sciences Campus, San Juan PR, Puerto Rico

Deadline for manuscript submissions:

**closed (30 September 2022)**

### Message from the Guest Editors

Cancer immunotherapeutics such as cancer vaccines and immune checkpoint inhibitors act by activating the immune system against cancer. Despite recent advances and encouraging successes, the pressing problem is the resistance to these treatments in the majority of patients; for example, only <10–15% of patients respond to checkpoint inhibitors such as anti-PD-1 and anti-CTLA-4. Therefore, understanding the mechanisms of resistance to immunotherapy as well as developing treatments to overcome resistance and improve responsiveness are critical areas of research. This Special Issue of the *International Journal of Molecular Sciences* will discuss emerging concepts in these areas. The topics will encompass molecular and cellular mechanisms of resistance to checkpoint blockade and anti-tumor vaccines, innate and acquired resistance, pathways of immunosuppression including suppressor cell populations, and approaches combining chemo-radiation or other targeted treatments to improve immunotherapy responsiveness and overall efficacy.



[mdpi.com/si/58377](https://mdpi.com/si/58377)

# Special Issue



an Open Access Journal by MDPI

## Editor-in-Chief

### Prof. Dr. Maurizio Battino

Department of  
Odontostomatologic and  
Specialized Clinical Sciences,  
Sez-Biochimica, Faculty of  
Medicine, Università Politecnica  
delle Marche, Via Ranieri 65,  
60100 Ancona, Italy

## Message from the Editor-in-Chief

The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) 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, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *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 (Inorganic 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