



## Molecular Alterations in Non-small Cell Lung Cancer: Biology and Therapeutic Implications

Guest Editor:

**Prof. Dr. Carlo Genova**

Department of Internal Medicine  
and Medical Specialties,  
Università degli Studi di Genova,  
16132 Genova, Italy

Deadline for manuscript  
submissions:

**closed (31 May 2022)**

### Message from the Guest Editor

In the last decade, studies on molecular alterations in non-small cell lung cancer (NSCLC) have improved the knowledge on the biological pathways involved in tumor development, as well as specific information involving tumor growth signals, inhibition of apoptosis, stimulation of neoangiogenesis, and escape from immune system.

Some of the detected alterations in NSCLC have led to the evolution of antineoplastic therapies; notable examples are represented by activating mutations of the epidermal growth factor receptor (EGFR) gene; furthermore, the list of potentially actionable target genes in NSCLC is constantly increasing. In addition, some emerging molecular alterations appear to be associated with differences in terms of response to immune checkpoint inhibitors, and the mechanisms leading to these correlations are under investigation.

This special issue explores the role of oncogenic drivers in terms of tumorigenesis and as potential therapeutic targets, as well as the NGS technologies needed to optimize the molecular characterization of NSCLC.





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