

## Special Issue

# In Vivo Biomarkers for Immunotherapy Efficacy in Brain Tumours

### Message from the Guest Editor

Immunotherapy, in a broad sense, is gaining ground in cancer treatment and recent literature suggests that brain tumours could also benefit from such strategies. However, we still lack early in vivo biomarkers of successful immunotherapy or, in other words, biomarkers signaling effective immune system recruitment and action against tumours. The well-known pseudoprogression and pseudoresponse phenomena can lead to a misinterpretation at follow-up of the in vivo response to therapy in brain tumours. Moreover, since repeated biopsy is not feasible in human patients and not all patients will benefit from these therapies, knowing in advance whether an immunotherapy is properly recruiting the immune system or not would be of great benefit to patient management. In this Special Issue, we invite researchers to submit original research articles or reviews covering different aspects of the development, validation, and evaluation of in vivo biomarkers of immunotherapy. Potential topics include, but are not limited to imaging biomarkers based on MR approaches or PET; biomarker validation; liquid biopsies; preclinical studies that unravel

---

### Guest Editor

Prof. Dr. Ana Paula Candiota

Centro de Investigación Biomédica en Red: Bioingeniería, Biomateriales y Nanomedicina, Departament de Bioquímica i Biologia Molecular, Facultat de Ciències/Biociències, Edifici Cs Campus UAB, 08193 Cerdanyola del Vallès, Spain

---

### Deadline for manuscript submissions

closed (31 January 2022)



## International Journal of Molecular Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.9  
CiteScore 9.0  
Indexed in PubMed



[mdpi.com/si/45333](https://mdpi.com/si/45333)

*International Journal of  
Molecular Sciences*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[ijms@mdpi.com](mailto:ijms@mdpi.com)

[mdpi.com/journal/  
ijms](https://mdpi.com/journal/ijms)





# International Journal of Molecular Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.9  
CiteScore 9.0  
Indexed in PubMed



[mdpi.com/journal/  
ijms](https://mdpi.com/journal/ijms)



## About the Journal

### 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.

---

### 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

---

### 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, CAPus / SciFinder, and other databases.

#### Journal Rank:

JCR - Q1 (Biochemistry and Molecular Biology) / CiteScore - Q1 (Organic Chemistry)