





an Open Access Journal by MDPI

Molecular Aspects of Cancer Radiotherapy

Guest Editor:

Prof. Dr. Susana Constantino Rosa Santos

Centro Cardiovascular, Faculdade de Medicina, Universidade de Lisboa (CCUL@RISE), 1649-028 Lisboa, Portugal

Deadline for manuscript submissions:

30 September 2024

Message from the Guest Editor

This Special Issue will gather recent research and advances in our understanding of the molecular aspects of radiotherapy in cancer treatment. We welcome articles exploring the molecular biology of radiation response and resistance processes, the development of novel therapies and combination approaches, and the identification of predictive and prognostic biomarkers. Additionally, we embrace studies investigating radiation-induced DNA damage and repair mechanisms, interactions between radiotherapy and the tumor microenvironment, the biological effects of ionizing radiation doses on peritumoral tissues and its consequence in tumor progression and metastasis development, the cardiotoxic effects of radiotherapy as a standalone therapy or in conjunction with chemotherapy and its relevance in the field of cardiooncology, and technological advances in precise radiation delivery. This Special Issue will foster discussion and knowledge exchange, positively impacting the efficacy and safety of radiotherapy in the context of cancer treatment.













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 & Molecular Biology*) / CiteScore - Q1 (*Inorganic Chemistry*)

Contact Us