Special Issue

MicroRNAs as Mediators of Tumor Cell State Transitions, Receptor Remodeling, Drug Resistance, and Systemic Metastasis

Message from the Guest Editors

Solid epithelial tumors predominate among the most common cancers affecting the human population worldwide. Heterogeneous clones that emerge randomly mid-therapy feature distinct traits, and their affinity for metastatic progression indicates a multi-gene network regulatory mechanism. An orchestrated gain or loss of regulatory molecular markers such as microRNAs, either as objective markers or in combination with other targeted genes and proteins, needs to be validated as an intermittent traceable alternative to the malignant status of tumors in situ. Such changes comprehensively represent the dysregulated molecular pathways in response to the tumor microenvironment and mediate the immune responsiveness of interacting cells in the tumor milieu. In addition, the presence of circulatory microRNAs tends to transiently alter this milieu, favoring the evolution of heterogeneous clones of resistant tumor cell variants. A spotlight on the effective mapping of the functionalities and timeliness of expression will address the therapeutic implications of microRNAs in restricting disease progression in solid epithelial tumors.

Guest Editors

Dr. Vinitha Richard

Discipline of Surgery, Lambe Institute for Translational Research, University of Galway, Galway, Ireland

Prof. Dr. Michael J. Kerin

Head of Discipline and Established Professor, Lambe Institute for Translational Research, University of Galway, Galway, Ireland

Deadline for manuscript submissions

31 August 2025

Biomedicines

an Open Access Journal by MDPI

Impact Factor 3.9
CiteScore 6.8
Indexed in PubMed

mdpi.com/si/191267

Biomedicines
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
biomedicines@mdpi.com

mdpi.com/journal/biomedicines

Biomedicines

an Open Access Journal by MDPI

Impact Factor 3.9
CiteScore 6.8
Indexed in PubMed

mdpi.com/journal/biomedicines

About the Journal

Message from the Editor-in-Chief

Biomedicines (ISSN 2227-9059) is an open access journal devoted to all aspects of research on human health and disease, the discovery and characterization of new therapeutic targets, therapeutic strategies, and research of naturally driven biomedicines, pharmaceuticals, and biopharmaceutical products. Topics include pathogenesis mechanisms of diseases, translational medical research, biomaterial in biomedical research, natural bioactive molecules, biologics, vaccines, gene therapies, cell-based therapies, targeted specific antibodies, recombinant therapeutic proteins, nanobiotechnology driven products, targeted therapy, bioimaging, biosensors, biomarkers, and biosimilars. The journal is open for publication of studies conducted at the basic science and preclinical research levels. We invite you to consider submitting your work to Biomedicines, be it original research, review articles, or developing Special Issues of current key topics.

Editor-in-Chief

Prof. Dr. Felipe Fregni
1. Neuromodulation Center and Center for Clinical Research Learning, Spaulding Rehabilitation Hospital and Massachusetts General Hospital, Harvard Medical School, Boston, MA 02114, USA
2. Department of Epidemiology, Harvard T.H. Chan School of Public Health, Boston, MA 02115, USA

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Pharmacology and Pharmacy) / CiteScore - Q1 (Medicine (miscellaneous))

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 17 days after submission; acceptance to publication is undertaken in 2.9 days (median values for papers published in this journal in the first half of 2025).