



## Autophagy in Cancer and Metastasis

Collection Editors:

**Dr. Paola Maroni**

**Prof. Dr. Giovanni Lombardi**

**Dr. Marta Gomasca**

### Message from the Collection Editors

Autophagy is a conserved catabolic process necessary for cells to maintain homeostasis and to respond to different environmental stresses through the recycling of their damaged cellular proteins, organelles, and other cellular components. Alteration in autophagy machinery may lead to diverse pathological conditions, including cancer. A close relationship between autophagy, malignant transformation, and cancer progression has been demonstrated in recent decades. Emerging evidence shows a role for autophagy in the modulation of tumor cell motility and invasion, in the promotion and maintenance of the stem-cell phenotype, in drug resistance, in tumor dormancy, and in immune surveillance, all of which are involved in the survival of cancer cells and in the development of metastases. Autophagy has both pro- and anti-tumorigenic roles, depending on the oncogenic context and the stage of tumorigenesis. This Topical Collection provides a general overview of how autophagy affects cancer growth and modulates the development and spread of metastases.





an Open Access Journal by MDPI

## 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

## 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.

## 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](#), [CAPUS / SciFinder](#), and [other databases](#).

**Journal Rank:** JCR - Q1 (Pharmacology and Pharmacy) / CiteScore - Q1 (Medicine (miscellaneous))

## Contact Us

*Biomedicines* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/biomedicines](http://mdpi.com/journal/biomedicines)  
[biomedicines@mdpi.com](mailto:biomedicines@mdpi.com)  
[X@Biomed\\_MDPI](#)