



life



an Open Access Journal by MDPI

The Interplay between Autophagy and ROS in Cancer

Guest Editors:

Prof. Dr. Kui Wang

West China School of Basic
Medical Sciences & Forensic
Medicine, State Key Laboratory of
Biotherapy and Cancer Center,
West China Hospital, Sichuan
University, and Collaborative
Innovation Center for Biotherapy,
Chengdu 610041, China

Prof. Dr. Yunlong Lei

Department of Biochemistry and
Molecular Biology, College of
Basic Medical Sciences,
Chongqing Medical University,
Chongqing 400016, China

Deadline for manuscript
submissions:

closed (30 November 2022)

Message from the Guest Editors

Dear Colleagues,

Cancer cells are commonly characterized by accumulation of reactive oxygen species (ROS). Optimal levels of ROS act as signaling molecules to promote the survival and proliferation of cancer cells, while excessive ROS levels are detrimental to cells. Autophagy is closely involved in ROS-mediated biological events in cancer cells. ROS can directly or indirectly stimulate autophagy. Reciprocally, autophagy serves as a survival mechanism to scavenge excessive ROS and buffer oxidative stress. However, contradictory to the above-mentioned opinions, ROS have also been reported to inhibit, rather than induce, autophagy; and autophagy can promote, rather than suppress, ROS accumulation. The complex reciprocity in ROS and autophagy regulation in cancer seems to be highly context-dependent. In this issue, the roles of ROS, autophagy and their interplay mechanisms in cancer will be highlighted, to enable a deeper understanding of cancer biology and favor the development of future cancer therapeutics.

Prof. Dr. Kui Wang
Prof. Dr. Yunlong Lei
Guest Editors



mdpi.com/si/113298

Special Issue



life



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Lluís Ribas de Pouplana

Institute for Research in
Biomedicine (IRB Barcelona), The
Barcelona Institute of Science
and Technology, 08028
Barcelona, Spain

Message from the Editor-in-Chief

Life (ISSN 2075-1729) is an international, peer-reviewed open access journal that publishes scientific studies related to fundamental themes in life sciences. Some papers are published individually, while others are submitted for inclusion in special issues with guest editors. You are invited to contribute a research article, essay, or a review to be considered for publication.

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](#), [AGRIS](#), and [other databases](#).

Journal Rank: JCR - Q2 (*Biology*) / CiteScore - Q2 (*Paleontology*)

Contact Us

Life Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/life
life@mdpi.com
[X@Life_MDPI](#)