

Special Issue on Control of Autophagy in Cancer

Call for Papers

Autophagy is a widely known adaptive mechanism observed in insufficiently nourished cells. Cancer cells in turn are featured by excessive proliferation and migration leading to higher demands for energy and nutrients. Achieving control of autophagy could become a novel therapeutic approach to limit growth and number of neoplastic cells, because inhibition of autophagy often causes tumor cell death by apoptosis. Calcium-permeable ion channels seem to be involved in autophagy of cancer cells. Modulation of calcium homeostasis evokes autophagy-like process in neoplastic cells. Other substances of natural origin were also observed to induce autophagy in cancer cells. This proposal is intended to attract investigators focusing their attention on substances specifically triggering cell death of cancer cells, without affecting healthy controls, even though the precise signaling network of their action remains obscure. Methods and biomarkers for monitoring autophagy and cell death today represent one of the most active areas in current research on tumor biology. Cancer treatment often requires adjuvant therapies, crucial for followup and final outcome. Despite being well developed, most cancer therapies still require molecular investigations for further advances in this field. A better understanding of the fundamental biological mechanisms involved in cancer onset, progression, and pathogenesis is required, as well as further advances in genomic, transcriptomic, proteomic, and metabolomic research. This special issue will welcome papers describing the state of the art, advantages and disadvantages, current limitations, and future perspectives of autophagy in the fight against cancer. Particular attention will be given to papers demonstrating specific effects on cancer cells of selected substances controlling autophagy. Of special interest are papers dealing with evidence for the clinical use substances known to markedly limit growth of tumors. We invite investigators to contribute original research papers and reviews on autophagy and cell death in cancer. Potential topics include, but are not limited to:

- Methodological approaches
- Imaging techniques
- Calcium-permeable ion channels controlling autophagy
- Energy metabolism/metabolomic

- Impact of autophagy on carcinogenesis and cancer progression
- Autophagy and immune escape
- Substances controlling autophagy in cancer cells

Before submission authors should carefully read over the journal's Author Guidelines, which are located at <http://www.hindawi.com/journals/bmri/guidelines/>. Prospective authors should submit an electronic copy of their complete manuscript through the journal Manuscript Tracking System at <http://mts.hindawi.com/submit/journals/bmri/oncology/cac/> according to the following timetable:

Manuscript Due	Friday, 29 August 2014
First Round of Reviews	Friday, 21 November 2014
Publication Date	Friday, 16 January 2015

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