

Special Issue

Tetraploid Cells in Health and Disease

Message from the Guest Editor

Tetraploidization is the condition of having twice as many chromosomes as their normal, diploid counterparts. With the exception of some physiological statuses, cells do not tolerate the tetraploidy and activate programmed death pathways or elicit immune responses resulting in their elimination. However, tetraploidy can constitute a metastable intermediate between healthy diploidy and neoplastic aneuploidy. Indeed, tetraploid cells are detected in many cancers and are associated with cancer progression and aggressiveness, as well as therapeutic resistance and poor prognosis. This Special Issue aims at presenting current status, recent developments, and future directions of research on tetraploid genomic status with emphasis on the following topics, but not only:

- Cancer research;
- Treatment therapy failure;
- Tetraploid stem cells;
- Animal models to study the disease mechanism of tetraploidization;
- Illicit survival of tetraploid cancer cells;
- Cancer metastasis provoked by tetraploidization.

Guest Editor

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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.

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