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Tetraploid Cells in Health and Disease

Guest Editor:

Dr. Mohamed Jemaà

 Human Genetics Laboratory (LR99ES10), Faculty of Medicine of Tunis, University of Tunis El Manar, Tunis 2092, Tunisia
LR18ES03 Laboratory of Neurophysiology, Cellular Physiopathology and Valorisation of Biomolecules, Faculty of Science of Tunis, University Tunis El Manar, Tunis 2092, Tunisia
Department of Biological Sciences, Faculty of Science of Tunis, University Tunis El Manar, Tunis 2092, Tunisia

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Message from the Guest Editor

Dear Colleagues,

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.





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Editor-in-Chief

Prof. Dr. Maurizio Battino

Department of Odontostomatologic and Specialized Clinical Sciences, Sez-Biochimica, Faculty of Medicine, Università Politecnica delle Marche, Via Ranieri 65, 60100 Ancona, Italy

Message from the Editor-in-Chief

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International Journal of Molecular Sciences Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/ijms ijms@mdpi.com X@IJMS_MDPI