Special Issue

The Mechanisms of Both Epigenetic Drugs and Epigenetic Modifiers Induced Tumor Cell Death

Message from the Guest Editor

Epigenetic modifications, including DNA methylation, histone modifications, chromatin remodeling, and non-coding RNAs, recognized for playing a fundamental role in cancer transformation and progression. These epigenetic aberrations regulate gene activity beyond the underlying sequence.

As a consequence, they also favor cell survival to drug by aberrant regulation of drug transporters, DNA-repair enzymes and pro-apoptotic factors expression, thus rendering cytotoxic and targeted drugs ineffective and allow selection of rare drug-resistant tumor cells. Moreover, the epigenetic modifiers have a direct effect on cell viability, affecting signaling pathway controlling cell survival or demise.

The aim of this Special Issue is to provide a broad overview on the topic of "Cancer Epigenetics and Epigenetic drugs" in the context of human cancer, drug resistance, and therapy. In particular, it is devoted to explore the link between epigenetic modifiers or epidrugs and cell death mechanism, and put forward an otherwise poorly understood role for epigenetic drugs as cell death inducers.

Guest Editor

Prof. Dr. Daniela Trisciuoglio

Department of Research, Advanced Diagnostics and Technological Innovation, Regina Elena National Cancer Institute, Rome, Italy

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

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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.

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

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