

Tentative Outline

Special Thematic Issue for Current Dugs Metabolism

Title of the thematic issue: The drug resistance mechanisms of cancer cells and a potential treatment strategy

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Aims & Scope: Despite the initial response to anti-cancer drugs, cancer cells acquire resistance to these drugs. This drug resistance mechanism has not been fully elucidated and has become a research theme to be overcome. The efflux transporter is well known to be involved in drug resistance. As an acquired drug resistance mechanism of molecular targeted drugs, involvement such as target gene modification, activation of alternative pathway, activation of target downstream, and histological transformation are clarified. Recent researches have revealed that miRNA or epigenetic changes in cancer cell also cause drug resistance. Furthermore, cancer stem cell responsible for drug resistance was reported to regulate intracellular metabolic mechanisms to survive. This thematic issue welcomes the original article, case report or review about drug resistance mechanisms of cancer cells and a potential treatment strategy.

6-8 Keywords: cancer, efflux transporter, acquired resistance, miRNA, epigenetic change, stem cell

Subtopics:

The subtopics to be covered within this issue are listed below:

1. Pathological findings of efflux transporter of cytotoxic anticancer drug and prognosis
2. Acquired drug resistance mechanism of molecular targeted drugs
3. Serine threonine kinase and drug resistance mechanism
4. Microbiome and drug resistance mechanism
5. Novel mechanisms of drug resistance
6. Potential treatment strategy to treat cancer stem cells

Schedule:

- ✧ Manuscript submission deadline: 15 September 2020
- ✧ Peer Review Due: 15 October 2020
- ✧ Revision Due: 15 November 2020
- ✧ Announcement of acceptance by the Guest Editors: January 2021
- ✧ Final manuscripts due: March 2021

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