

Tentative Outline

Special Thematic Issue for Current Dugs Metabolism

Title of the thematic issue: Challenges in the discovery of novel therapeutic agents in cancer

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Aims & Scope:

One of the major challenges currently facing cancer therapy is the development of drug resistance either intrinsically or as a result of treatment. Treatment evasion is mediated by an intricate web of signalling cascades and adaptations caused by selective therapeutic pressure, leading to metastatic spread and patient death. Hence, discovering and designing novel therapeutic compounds and regimens based on specific alterations in the cancer microenvironment and capable of overcoming resistance to traditional therapies is necessary to improve cancer survival outcomes. These new therapeutic modalities should exhibit improved solubility, penetration capacity and bioavailability in the tumor microenvironment as well as enhanced target specificity compared to old generation compounds. The success of this endeavor will contribute to the advent of precision medicine leading to personalized therapeutic approaches for patients.

6-8 Keywords: Cancer; drug resistance; therapy; genetic manipulations; stem cells; immune system; drug analogues.

Subtopics:

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

1. Radiochemoresistance is a major obstacle to the development of novel therapeutic drugs in cancer
2. Barriers against the action of chemotherapeutic drugs in cancer treatment
3. The role of genetic manipulation in the development of novel cancer drugs
4. The role of stem cell populations in cancer growth, metastasis and drug escape
5. Immune machinery in immune suppression and drug resistance in cancer
6. Drug analogues for the development of fourth generation therapeutic drug
7. The role of preventive medicine and personalized care in overcoming cancer resistance and metastasis

Schedule:

- ✧ Manuscript submission deadline: 15 September 2019
- ✧ Peer Review Due: 15 October 2019
- ✧ Revision Due: 15 November 2019
- ✧ Announcement of acceptance by the Guest Editors: January 2020
- ✧ Final manuscripts due: March 2020

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