

Tentative Outline

Special Thematic Issue for the journal : *Current Drug Targets*

Title of the Thematic Issue: RECENT MEDICINAL CHEMISTRY STUDIES FOR MULTITARGET AGENTS

Guest Editors: *LUCIANA SCOTTI, MARCUS T SCOTTI*

- **Scope of the Thematic Issue:**

The basic principle of action of a drug is based on model lock and key, where is desirable the highest possible affinity for a target avoiding no side effects. For many years it was desirable 'one drug for one target for one disease', however the researchers observed that complex diseases are best addressed when treated with drugs multi-targets. However, in the recent years the researches try find polypharmacology- drugs that act on multiple rather than single targets against complex diseases, such as oncology, psychiatry and anti-infectives. Examples are: the fluoroquinolone that inhibits two of the multiple penicillin-binding proteins to induce cell death; anti-psychotic drugs exhibit activities in serotonin and dopamine receptors; the protein kinase inhibitors, including sunitinib (Sutent) and imatinib (Gleevec) against cancer. In the searches, new drugs against a specific target of one disease have been found to be active against another target of a different disease and/or reduce the resistance. All additional activities of these drugs should be explored in repositioning them for new therapeutic applications. This special issue will be dedicated to multi-target chemicals (drugs, organic compounds, nanoparticles), including (but limited to) those with dual (or multiple) mechanisms of action. The manuscripts should be focused in evaluations of activities/toxicities of chemicals against two or more biological targets (proteins and/or enzymes, cells, microorganisms, etc).

Keywords: MULTITARGET, MEDICINAL CHEMISTRY, POLYPHARMACOLOGY, ENZYME, THERAPY, TARGET.

Sub-topics:

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Schedule:

- ✧ Thematic issue submission deadline:
- ✧ Tentative submission deadline: 15, February 2020.
- ✧ Tentative submission of revised manuscript: 30, April 2020.
- ✧ Submission of issue: 10, May 2020.
- ✧ Following are some authors that can publish in this thematic issue.

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