A Dual-Approach for the Mutagenicity Assessment of Hypolipidemic Drugs: From Wet-Lab Genotoxicity Assays to In silico QSAR (Quantitative Structure-Activity Relationship)

Aims & Scope

The aim of this issue is to combine the latest research and developments in the area of toxicophore identification of hypolipidemic drugs. For this purpose, a dual-approach using data from genotoxicity and QSAR (quantitative structure-activity relationship) studies, on the basis of the central axiom that the activity of molecules is reflected in their structure, will be combined to achieve more rational design of hypolipidemic drugs that show little or no genotoxic effects.

The specific purpose of the Special Issue “A Dual-Approach for the Mutagenicity Assessment of Hypolipidemic Drugs: From Wet-Lab Genotoxicity Assays to In silico QSAR Studies” is to provide detailed mechanistic knowledge on how hypolipidemic drugs interact with distinct cellular macromolecules leading to geno(cyto)toxicity using data from cell-based in vitro/in vivo assays and in silico QSAR studies. In this context, it is envisioned that the mechanisms and identification of genotoxic properties of these drugs would be best described combining wet-lab genotoxicity and quantitative in silico studies. This special issue also provides a platform for researchers to present and discuss most recent research and developments in these areas both serve as distinct tools for efficient design of new drugs with safer profiles.

State of the art reviews will be accepted. We anticipate that the special issue will open new horizon for further research and technology improvements in this important area.
Keywords: Hypolipidemic drugs, Genotoxicity, Cytotoxicity, Quantitative Structure-Activity Relationship (QSAR), Safer Drugs

Subtopics:

- Hypolipidemic Drugs
- QSAR
- Chromosome Aberration
- Micronucleus
- Gene Mutation
- Epigenetic Effects
- Genotoxic Toxicophores
- Cytotoxic Toxicophores
- Mechanisms of Cytotoxicity
- Mechanisms of Cytostaticity

Papers submitted for publication for this special issue will be peer reviewed and selected on the basis of their quality and relevance to the theme of this special issue. Submitted manuscripts should not have been published previously, nor be under consideration for publication elsewhere. A guide for authors and other relevant information for submission of manuscripts is available on the Instructions for Authors page (http://benthamscience.com/journals/recent-patents-onengineering/author-guidelines/#top).

Please submit your manuscript via email to ermansalih@gmail.com.

Schedule:

Manuscript submission deadline: Sep. 15, 2017
Peer Review Due: Oct. 15, 2017
Revision Due: Oct. 30, 2017
Notification of Acceptance by the Guest Editor: Nov. 25, 2017
Final Manuscripts Due: Dec. 09, 2017