

Tentative Outline

Special Issue for Current Medicinal Chemistry

Guest Editor: Prof. Yun-Long Wu

Natural Anti-Inflammatory Compounds as Drug Candidates

Aims & Scope:

Inflammation is a natural response mechanisms of an organism to pathogenic factors. However, uncontrolled inflammation is involved in a large number of diseases such as allergies, asthma, rheumatoid arthritis, inflammatory bowel diseases, atherosclerosis, diabetes, cancer and Alzheimer. Thus, inflammation is increasingly considered as a crucial biological pathway and research in this area is very active with the availability and advancement of various types of in-vitro and in-vivo inflammatory models. Key enzymes, intracellular signaling pathways and transcription factors involved in inflammation processes have been identified and provide new targets for new anti-inflammatory compounds. Natural products possess an enormous library of novel compounds with wide biological properties useful in the drug discovery process. On this basis, the exploration of natural originated novel anti-inflammatory drug candidates, by separation, chemical synthesis, and structural design and modification methods, represents a key pharmacological goal.

In this special issue, we would focus on the anti-inflammatory molecules with druggable potentials from plants, animals, microorganisms, and marine-sources, etc. The topic will include but be not limited to the latest development in small molecule discovery and structural elucidation, chemical synthesis and biosynthesis, biochemical and pharmacological study, etc. And we strongly believe that this proposed theme issue will be interesting to board readers of Current Medicinal Chemistry and increase the journal impact in the field of medicinal chemistry.

Keywords:

- Natural products, chemical synthesis, structural design and modification, anti-inflammatory.

Subtopics to be covered (main bioactive component):

(1) Discovery of anti-inflammatory natural products.

- (2) Chemical synthesis, structural design and modification of anti-inflammatory natural products.
- (3) Biological and pharmacological study of anti-inflammatory natural products.
- (4) New technology and methods for disclosing anti-inflammatory molecules from natural resource.

Schedule:

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