

Tentative Outline

Special Thematic Issue for Current Neuropharmacology

Title of thematic issue:

“Depression, Anxiety, Parkinson and Alzheimer’s diseases: Natural Products as Medical Barriers”

Guest Editor(s): Prof. Eduardo Sobarzo-Sánchez, Prof. Esra Küpeli Akkol and Prof. Seyed Mohammad Nabavi

Aims & Scope: In our time, many compounds from natural sources are available either in nature or commercialized by the pharmaceutical industry that multiple therapeutic actions have developed in the treatment of diverse diseases and dysfunctions on the Central Nervous System (CNS). For Parkinson’s disease (PD), some alternative surgeries have required either of electrical implants to limit the involuntary muscular spasms or the controlled drug injection on the brain, which do not generate a reliable alternative to patients. Alzheimer’s disease (AD) is a progressive disease, wherein dementia symptoms gradually worsen over a number of years. Moreover, in its early stages, memory loss is mild, but with late-stage Alzheimer’s, individuals lose the ability to carry on a conversation and respond to their environment. On the other hand, mood disorders have been studied due to the medical implications related with severe symptoms that affect how you feel, think, and handle daily activities, such as sleeping, eating, or working.

At present, synthetic methodologies have been developed for the preparation of chiral compounds as well as of complex heterocycles and hydrocarbo-cycles derived from marine and terrestrial natural products. In order to assure a high selectivity of the tested drug, molecular modeling simulation with well-known crystallized biological receptors has been extensively studied with an important acceptance, and obtaining designed drugs with high biological reactivity in certain mental disorders.

Therefore, the aim of this special issue, is to compile diverse research and reviews articles for future and novel therapeutic applications in treating depression, anxiety and the neurodegenerative diseases such as Parkinson and Alzheimer by using designed heterocyclic and/or cyclic hydrocarbon compounds inspired from natural sources. Thus, the inclusion of synthesis, isolation, theoretical studies of structure-activity relationship and pharmacological-clinical trials are welcome.

Keywords: CNS dysfunctions, Alzheimer’s disease, Parkinson’s disease, Natural Products, Neuro-degenerative disorders, Motor dysfunctions, Depression, Anxiety.

Subtopics:

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

- Studies of isolation, chemical characterization of new drugs against mood disorders and neurodegenerative disease and their symptoms.
- Conventional synthesis of active heterocycles and hydrocarbon-cycles.
- Studies of structure-activity relationship and computational design to improve the current drugs and to propose novel drugs by using conventional methodology and/or the use of supramolecular systems to release the active compounds.
- Clinical trials and medical applications of the active compounds.

Schedule:

- Manuscript submission deadline: **May 2020**
- Peer Review Due: **June 2020**
- Revision Due: **July 2020**
- Announcement of acceptance by the Guest Editors: **August 2020**
- Final manuscripts due: **August 2020**

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