

Call for Papers
Special Issue for Journal of Pharmacy and Pharmacology

Advance on natural products for Alzheimer's disease therapy: Basic and application

Guest Editor:

Dr. Jianbo Xiao

Research Center of Bio-separation Engineering Technology

Anhui Institute of Applied Technology

Suixi Road 312,

Hefei

Anhui 230031, PR China.

E-mail: jianboxiao@yahoo.com

Prof. Rosa Tundis

Department of Pharmaceutical Sciences,

Faculty of Pharmacy, Nutrition and Health Sciences,

University of Calabria

Via P. Bucci

87036 Rende (cs) Italy

E-mail: tundis@unical.it

Aims & scope

Alzheimer's disease (AD) is a leading cause of dementia in developed countries. Currently, most of the drugs available for the treatment of AD are AChEi: tacrine, donepezil, rivastigmine and galanthamine, all of them with limited effectiveness and some kind of side effect. Natural products are significant sources of traditional herbal medicines for treatment of AD. For example, galanthamine is a natural alkaloid first obtained from *Galanthus* spp. (US-FDA approval in 2001). Huperzine A, an alkaloid found in *Huperzia* spp., is an AChEi commercialized as a dietary supplement for memory support, used to treat AD symptoms in China. These compounds have been widely studied in cognitive performance evaluation and investigations about their efficacy, tolerance and safety. Most of these compounds belong to the alkaloid group, with great structural diversification, including indole, isoquinoline, quinolizidine, piperidine and steroidal alkaloids. Besides, several non-alkaloidal and potent AD treatments have been obtained from natural sources, including terpenoids, flavonoids and other phenolic compounds. Nevertheless, the search of natural products for treatment of from plants still draws considerably attention and the number of papers published every year in this field is far from decline. This issue will focus on the mechanism of natural products from plants used for treatment of AD, the structure-activity relationship of natural products for therapy AD, as well as the new

strategy of using natural products for AD. The review, communication, report, regular paper and perspective are all welcomed.

Subtopics:

- Enzyme inhibitors for AD from natural sources: structure elucidation and mechanism of action.
- Traditional and alternative methods for treatment of AD.
- Natural products/extracts from plants used for treatment of AD.
- Structure-activity relationship of natural products for therapy AD.
- New strategy of using natural products for AD.
- Natural antioxidants used to treat AD and the mechanism.
- Molecular mechanisms of natural products for treatment of AD
- Metabolites of AChE inhibitors from natural sources.
- AChE inhibitory activity of plant extracts and their components.

Deadline:

February 30, 2013