

ChinherbAD – The multitarget low molecular compounds from traditional Chinese herbs in treatment of Alzheimer's disease

<https://neurodegenerationresearch.eu/survey/chinherbad-the-multitarget-low-molecular-compounds-from-traditional-chinese-herbs-in-treatment-of-alzheimers-disease/>

Principal Investigators

doc. RNDr. Gažová Zuzana CSc.

Institution

Institute of Experimental Physics of the Slovak Academy of Sciences

Contact information of lead PI

Country

Slovakia

Title of project or programme

ChinherbAD - The multitarget low molecular compounds from traditional Chinese herbs in treatment of Alzheimer's disease

Source of funding information

Ministry of Education, Science, Research and Sport of the Slovak

Total sum awarded (Euro)

€ 8,000

Start date of award

01/01/2016

Total duration of award in years

1

Keywords

Research Abstract

Alzheimer's disease (AD) is a devastating neurodegenerative disorder of multifactorial nature characterized by neuroinflammation, decreasing the level of the neurotransmitter acetylcholine as well as formation of amyloid Abeta peptide plaques and neurofibrillary tangles containing abnormally posttranslationally modified tau protein. There is no effective treatment for AD so far and none of the clinically tested drugs have any feasibility to stop, substantially delay or reverse

the progressive consequences of this disease. Accordingly, there is a considerable world-wide interest to facilitate the drug development for AD. Recently, the strategy of using the multi-targeted ligands seems to be the most attractive for developing effective therapy for Alzheimer's disease due to ability of these compounds interacts with multiple targets responsible for the disease pathogenesis. The main goal of this project is to investigate multi-target responsibility of compounds including extracts from traditional Chinese herbs as potential therapeutic agents for AD. Using in vitro, in vivo and in silico methods we will study ability of these compounds to affect the neuroinflammation, to inhibit acetylcholinesterase activity, and amyloid aggregation of Abeta peptide. The bilateral collaboration will allow the both research groups to combine their expertise and experience in the field of pathology of Alzheimer's disease. The complementary approach allows obtain more complex data leading to suggestion of possible alternatives of therapy against this devastating disease. Moreover, the project will also enable mutual utilization of equipment provided by both institutions. At the same time the young members of project's team will have the opportunity to learn new techniques in well-equipped laboratories at SAS and East China University of Science and Technology and also work in the international scientific team.

Further information available at:

https://www.sav.sk/?lang=en&doc=ins-org-ins&institute_no=77&action=projects

Types:

Investments < €500k

Member States:

Slovakia

Diseases:

N/A

Years:

2016

Database Categories:

N/A

Database Tags:

N/A