

New Metal-Protein Attenuating Compounds with Neurotrophic Properties as a Therapeutic Strategy in Alzheimer's Disease

<https://www.neurodegenerationresearch.eu/survey/title-of-pinew-metal-protein-attenuating-compounds-with-neurotrophic-properties-as-a-therapeutic-strategy-in-alzheimers-disease/>

Title of project or programme

Title of PI New Metal-Protein Attenuating Compounds with Neurotrophic Properties as a Therapeutic Strategy in Alzheimer's Disease

Principal Investigators of project/programme grant

Title	Forname	Surname	Institution	Country
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Dr	Adina	Michael-Titus	University of London	UK
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Address of institution of lead PI

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- United Kingdom

Source of funding information

Total sum awarded (Euro)

554804.55

Start date of award

10-05-2010

Total duration of award in months

24

The project/programme is most relevant to

- Alzheimer's disease and other dementias

Keywords

Research abstract in English

Alzheimer's disease (AD) is the most common form of dementia, a devastating disease characterised by the loss of mental function. None of the drugs currently on the market affect significantly the disease. Anti-amyloid strategies are at the core of AD research, and it has been shown that Metal Protein-Attenuating Compounds (MPACs) which bind zinc and copper, reduce amyloid load and

toxicity. Clinical trial results with MPACs which are quinoline compounds show excellent tolerability and improved cognition in AD patients and therefore show that MPACs are promising new AD drugs. Our project aims to further develop new substituted phosphonate MPACs, and facilitate the selection of a compound for Phase 1. Our proprietary non-quinoline MPAC compounds have additional and unique neurotrophic properties, which are particularly relevant in the context of AD, making these compounds better than the existing MPACs. The project will provide in vitro and in vivo efficacy data, safety, toxicity, metabolism and pharmacokinetic data, and thus facilitate the choice of a candidate compound for first studies in man.

Lay summary

In which category does this research fall?

- Basic research