

# NEW COMPOUNDS AND METHODS FOR ALZHEIMER

## (blocking the toxic effects of the 1-42 $\beta$ amyloid peptide)

**This invention identifies a new family of compounds, which are suitable for blocking the toxic effects of the 1-42  $\beta$  amyloid peptide both *in vitro* and *in vivo*.**

### TYPE OF DEVELOPMENT

Drug.

### DESCRIPTION

Neural dysfunction has emerged as one of the central elements of study in Alzheimer's disease. However, other cell lineages present in the brain, such as astrocytes, play an important role in early cognitive loss. In fact, the increase in reactive astrocytes intimately associated with amyloid plaques has become a pathological hallmark of Alzheimer's disease.

Currently, neurodegeneration investigations are focused on discovering the signaling pathways that could be controlled by the 1-42  $\beta$  amyloid peptide. It seems clear that the effects of the 1-42  $\beta$  amyloid peptide are associated with oxidative stress, mitochondrial dysfunction, Ca<sup>2+</sup> + homeostasis alteration, NO generation, microglia activation and others. However, there is still controversy in the explanation of the causal relationship or the exact sequence of these events.

This invention relates to the development of polypeptides for the treatment of diseases associated with amyloid deposits and more specifically for the treatment of the Alzheimer disease. The invention also relates to compositions comprising the developed polypeptides and a method for the identification of compounds useful for the treatment of diseases associated with the formation of amyloid deposits.

### INDICATION

Treatment of diseases associated with amyloid deposits and more specifically for the treatment of the Alzheimer disease.

### NOVELTY/ADVANTAGE

- Exert their action in the extracellular space.
- High chemical stability.
- Easy preparation.
- Absence of toxicity.
- Cheap to prepare.

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Universidad  
del País Vasco

Euskal Herriko  
Unibertsitatea

### Research group:

Cancer Molecular Biology.

### Main researcher:

José Luis Zugaza.

### Contact:

Knowledge/Technology Transfer  
Office, [iproperty.otri@ehu.eus](mailto:iproperty.otri@ehu.eus)

### IPR STATUS

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#### Applicant:

University of the Basque Country  
(UPV/EHU).

### COOPERATION GOAL

Company interested in the  
license and commercialisation  
of the product.