

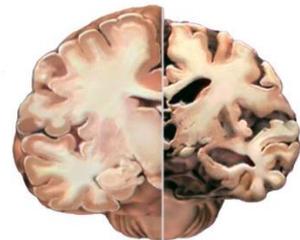
Method for the diagnosis and/or prognosis of Alzheimer disease

Description

Alzheimer disease (AD) is the most common form of dementia among elderly population. However, there are still no biochemical markers to distinguish AD from other types of dementia. The reliability of clinical diagnosis is around 80%, and a final diagnosis can only be made after histopathological examination by means of a brain biopsy or autopsy. Therefore, early detection of this type of dementia is, at least for now, impossible.

The possibility of presenilin 1 (PS1), an active compound in the γ -secretase complex involved in the development and progress of Alzheimer disease, being present in soluble form, and therefore being measurable in cerebrospinal fluid (CSF), had not been explored yet. Notwithstanding this, our experience in the last few years with the study of PS1 made us consider the possibility of PS1 being detectable in CSF, and so we proved that this transmembrane protein forms complexes in the soluble form.

This invention is based upon the determination of PS1 heteromeric complexes comprising C-terminal and N-terminal fragments for the diagnosis and/or prognosis of Alzheimer Disease (AD), and therefore is an alternative method for the diagnosis and/or prognosis of AD based upon the use of said heteromeric compound.



Technical Advantages

Besides its applications for early diagnosis and in combination with other markers, the invention will most probably be of great interest for monitoring the progression of the disease and using it in therapy prognosis. In this respect, it is key to highlight how important it is that some of the compounds now under development are γ -secretase activity inhibitors, since it can be very interesting to calculate PS1 levels in patients' CSL in clinical trials with these and other drugs.

Status of technology development and intellectual property

The technology is pending validation and item testing for subsequent marketing. Protected by a patent in Spain, and currently undergoing PCT procedure.

Contact

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